

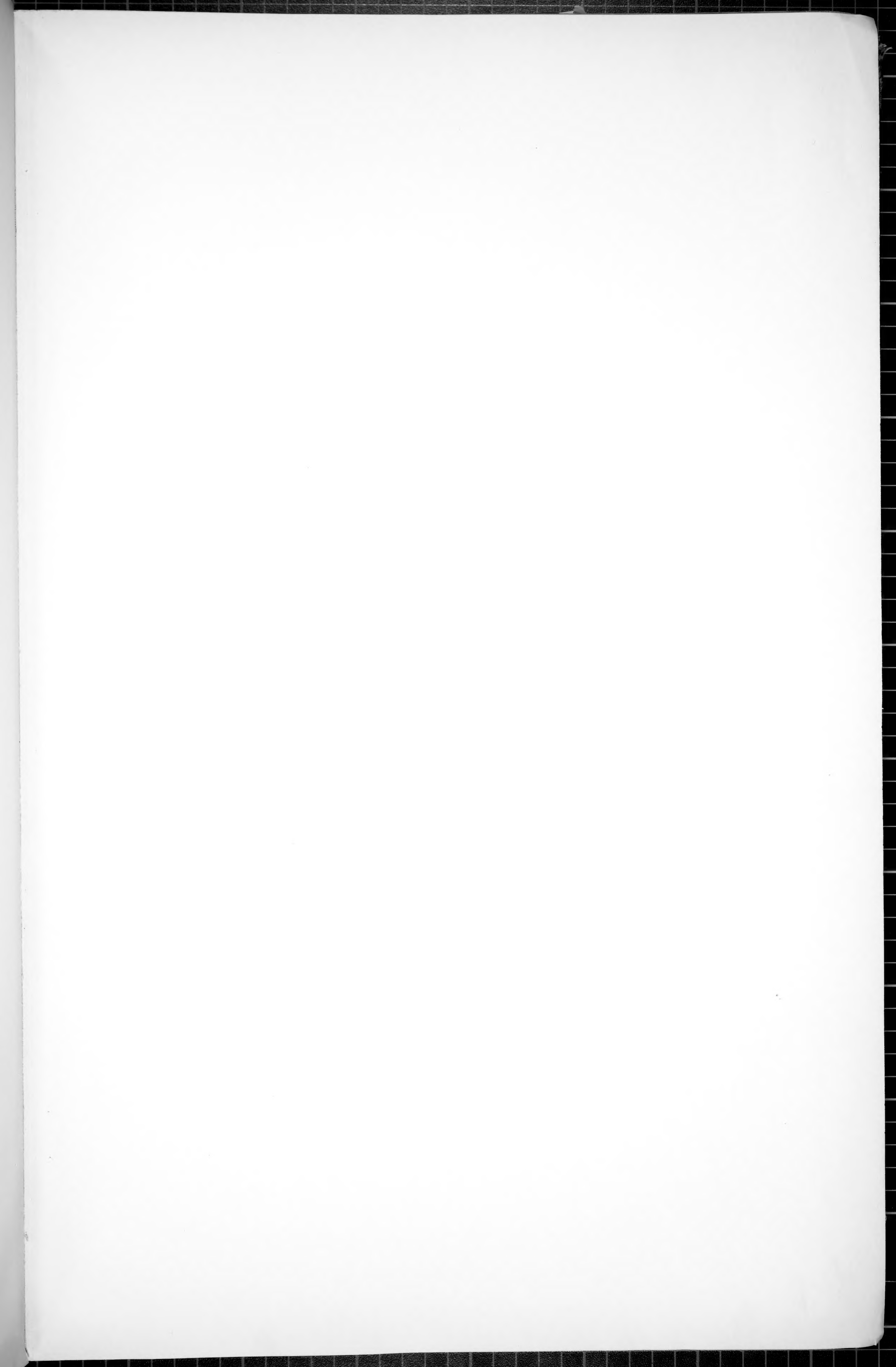




INVERTEBRATE  
ZOOLOGY  
Crustacea











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Crustacea

WORKING TO BEHOLD  
JUN 17 1857

UNITED STATES  
EXPLORING EXPEDITION.

DURING THE YEARS

1838, 1839, 1840, 1841, 1842.

UNDER THE COMMAND OF

CHARLES WILKES, U. S. N.

ATLAS.  
CRUSTACEA.

BY

JAMES D. DANA, LL.D.,

MEMBER OF THE SOC. C.E.S. NAT. CUR. OF MOSCOW; THE SOC. PHILOMATHIQUE OF PARIS; THE  
GEOLOGICAL SOCIETY OF LONDON; THE AMERICAN ACADEMY OF ARTS AND SCIENCES  
AT BOSTON; THE ACADEMY OF NATURAL SCIENCES AT PHILADELPHIA, ETC.

BY AUTHORITY OF CONGRESS.

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## EXPLANATION OF PLATES.

### PREFATORY REMARKS.

AFTER the engraving of the Plates of this Atlas was completed, a large part of the original drawings were destroyed by fire in Philadelphia. In consequence of this catastrophe, many of the following Plates, which were to have been coloured from the missing drawings, are issued uncoloured. Some of the figures here engraved represent known species, the colours of which had either not been given by other authors, or only from dead and faded specimens: as the coloured originals are gone, these figures have lost the principal part of their interest. These facts explain some discrepancies between the text of this Report and the Atlas.

The drawings for this Atlas, issued at this late date, were to a large extent made during the years 1838 to 1842, in the course of the cruise of the Expedition; and in the history of the Science, they would properly have their place in that period.

In closing my labours in connection with the Exploring Expedition, I take this opportunity to observe that, in the preparation of my several Reports, and the Atlases, with which they are illustrated, I have had, half a dozen plates excepted, neither the assistance of an amanuensis nor a draftsman. The plates, however, owe much to the artistic skill and taste of Mr. Joseph Drayton, Artist of the Expedition, who has superintended the engraving and printing, and contributed in many ways to the beauty of the work.

JAMES D. DANA.

NEW HAVEN, January 1, 1855.

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Fig. 1 *a*. *EUPHAUSIA SUPERBA*, enlarged two diameters; *b*, front, with eyes and base of antennæ; *c*, caudal extremity; *d*, under view of mouth, as covered by the maxillipeds, and showing the extremities of the mandibular palpi; *e*, mandible; *f*, maxilla; *g*, lower lip; *h*, shorter branch of abdominal leg of first pair; *h'*, basal portion of the same leg; *h''*, a process of shorter branch, more enlarged; *h'''*, ciliated natatory lamina of same; *i*, abdominal leg of second pair; *k*, basal portion of thoracic leg of third pair; *l*, stomach, side view; *m*, same, opened longitudinally above and showing inside, the view as seen by transmitted light, the dark parts being thickest; *n*, liver and duct; *n'*, section of same; *o*, branchia of posterior pair; *o'*, extremity of one of the branchlets of the same.—p. 645.

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Fig. 2 *a*. *SIRIELLA GRACILIS* (?), male, enlarged twelve diameters (length of specimen, four lines); *b*, caudal extremity; *c*, part of abdomen, preceding the caudal segment, in profile.—p. 658.

Fig. 3 *a*. *SIRIELLA BREVIPES*, enlarged twenty diameters; *b*, caudal extremity.—p. 660.

Fig. 4 *a*. *LOXOPIS TRIDENS*, enlarged eight diameters; *b*, head, upper view; *c*, caudal extremity.—p. 661.

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Fig. 6. *SCELETINA LATICEPS*, enlarged twenty-four diameters.—p. 664.

Fig. 7 *a*. *SCELETINA ORIENTALIS*, enlarged ten diameters; *b*, dorsal view of carapax; *c*, caudal extremity; *d*, palpus or shorter branch of legs.—p. 665.

Fig. 8 *a*, *b*. *RACHITIA SPINALIS*, young, enlarged twenty diameters; *c*, caudal extremity.—p. 667.

Fig. 9 *a*. *LUCIFER ACESTRA*, male, enlarged four diameters; *b*, anterior half, more enlarged; *c*, side view of caudal extremity in

male; *c'*, caudal segment, upper view; *d*, mandible; *e, f*, maxillae of first and second pairs; *g*, outer maxillipeds; *h*, posterior extremity of cephalothorax, showing a glassy gland, *m'*, which had been exerted by pressure; *m''*, same organ, as it appeared after it had been a short time detached from the animal; *i*, outline of posterior part of thorax of female.—p. 671.

## P L A T E 45.

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Fig. 7 *a*. *FURCILLA GRACILIS*, enlarged; *b*, caudal extremity; *c*, inner antenna; *d*, outer, *ibid.*; *e, f, g, h*, thoracic legs in succession.—p. 679.

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Fig. 12 *a*. *ZOEAE LONGISPINA*, enlarged; *a'*, same, natural size; *b*, extremity of superior antenna; *c*, caudal extremity.—p. 684.

## II. TETRADECAPODA.

## P L A T E 46.

Fig. 1 *a*. *IDOTAEA ARGENTEA*, enlarged four diameters; *b, c*, antennae, more enlarged; *d*, mouth; *e*, one of the legs; *f*, opercular plates of abdomen; *g*, young, probably of this species; *h*, from a New Zealand specimen, probably this species, outer antenna; *i*, *ibid.*, leg of fourth pair.—p. 698, 699.

Fig. 2 *a*. *IDOTAEA MARGARITACEA*, enlarged three diameters; *b*, caudal extremity; *c*, outer antenna; *d*, extremity of the flagellum of another specimen.—p. 700.

Fig. 3 *a*. *IDOTAEA ANNULATA*, enlarged two and a half diameters; *b, c*, antennae; *d*, leg of first pair; *e*, *ibid.*, of third pair.—p. 701.

Fig. 4 *a*. *IDOTAEA BREVICAUDA*, enlarged three diameters; *b*, part of flagellum of outer antenna.—p. 702.

Fig. 5 *a*. *I. BREVICAUDA* (?), young; *b*, leg of fifth pair; *c*, opercular plate of abdomen.—p. 703.

Fig. 6 *a*. *IDOTAEA OCCIDENTALIS*, natural size; *b*, inner antenna; *c*, leg of last pair, enlarged three and a half diameters.—p. 704. [As the name *hirtipes* is preoccupied, it is here changed to *occidentalis*.]

Fig. 7 *a*. *IDOTAEA STRICTA*, enlarged two diameters; *b*, leg of seventh pair.—p. 704.

Fig. 8 *a*. *EPELYS ANNULATUS*, enlarged four and a half diameters; *b*, inner antenna; *c*, outer antenna; *d*, mandible, in one view; *d'*, extremity of same, in another; *e*, inner maxilla; *f*, maxilliped; *g*, leg of fourth pair.—p. 706.

Fig. 9 *a*. *CLEANTIS LINEARIS*, enlarged one and a half diameters; *b*, inner antenna; *c*, extremity of outer; *d*, under view of head, showing maxillipeds; *e*, mandible; *f*, maxilla of first pair; *g*, *ibid.*, of second pair; *h*, appendage of first abdominal pair; *i*, *ibid.*, of second pair; *k*, outer or opercular pair; *l*, tarsus.—p. 708.

Fig. 10. *ERICHSONIA ANGULATA*, enlarged three diameters.—p. 710.

Fig. 11 *a*. *CHETELIA OVATA*, enlarged one and a half diameters; *b*, part of head, with antennae; *c*, leg of one of three anterior pairs; *d*, *ibid.*, of fourth pair; *e*, *ibid.*, of fifth pair; *f*, one of opercular abdominal plates.—p. 712.

## P L A T E 47.

Fig. 1 *a*. *TYLUS SPINULOSUS*, enlarged four diameters; *b*, part of outer antenna, enlarged twenty-four diameters; *c*, caudal lamellae.—p. 717.

Fig. 2 *a*. *ARMADILLO SPECIOSUS*, natural size; *b*, under view of abdomen; *c*, caudal stylets (or lamellae) separated from the abdomen and much enlarged; *d*, antenna.—p. 718.

Fig. 3 *a*. *SPHERILLO* (?) *MONOLINUS*, enlarged four diameters; *b*, antenna; *c*, leg of posterior pair; *d*, extremity of abdomen, under view, showing caudal lamellae, the outer appendage of the lamellae not being represented (perhaps, but not probably obsolete).—p. 719.

Fig. 4 *a*. *SPHERILLO VITIENSIS*, enlarged five diameters; *b*, antenna; *c*, leg of fifth or sixth pair; *d*, caudal lamella, with *b*, the inner appendage, and *a*, the outer.—p. 721.

Fig. 5 *a*. *SPHERILLO HAWAIIENSIS*, enlarged three diameters; *b*, antenna; *c*, leg of fifth pair; *d*, under view of abdomen; *e*, caudal extremity, upper view, showing caudal lamella (*c*), with the outer appendage (*a*), the inner appendage being shown in fig. 5 *d*.—p. 722.

Fig. 6 *a, b*. *SPHERILLO SPINOSUS*, enlarged five diameters; *c*, under view of head; *d*, spine of surface of body; *e*, caudal extremity, upper view, showing part of the caudal lamellae (*c, e*), and

the outer appendage, *a*; *f*, under view of caudal lamellæ, showing both outer (*a*) and inner (*b*) of the appendages or branches; *g*, part of antenna, much enlarged.—p. 723.

Fig. 7 *a*. PORCELLIO GEMMULATUS, enlarged four diameters (dots in the figure, a little too seriate); *b*, extremity of antenna; *c*, apex of same; *d*, leg of second pair, enlarged; *e*, *f*, *g*, spines of under surface of same leg, from fourth joint.—p. 725.

Fig. 8 *a*. PORCELLIO (?) FUEGIENSIS, enlarged four diameters; *b*, part of body, with the posterior thoracic segments bent down on either side as in some preserved specimens; *c*, extremity of abdomen; *d*, extremity of leg of last pair.—p. 726.

Fig. 9 *a*. PORCELLIO CHILENSIS, enlarged three diameters; *b*, base of antenna; *c*, extremity of antenna; *d*, extremity of leg of first pair, in outline; *e*, caudal stylets.—p. 727.

Fig. 10. PORCELLIO (?) HAWAIIENSIS, enlarged three diameters.—p. 728.

Fig. 11 *a*. PORCELLIO ———? enlarged four and a half diameters; *b*, extremity of antenna; *c*, apex of same.—p. 732. [It is incorrectly called a Philoscia on p. 732; and in the reference to 11 *c*, "second joint of" should be omitted.]

## P L A T E 48.

Fig. 1 *a*. ONISCUS NIGRESCENS, enlarged one and a half diameters; *b*, abdomen, under view; *c*, outer maxilliped.—p. 728.

Fig. 2 *a*. ONISCUS PUBESCENS, enlarged three and a half diameters; *b*, antenna; *c*, leg of sixth pair; *d*, caudal stylet.—p. 730.

Fig. 3 *a*. ONISCUS? ANGUSTUS, enlarged six diameters, mutilated in its antennæ; *b*, outer maxilliped; *c*, extremity of leg of first pair; *d*, *ibid.*, of last pair.—p. 731.

Fig. 4 *a*. ONISCUS? MACULATUS, enlarged six diameters, mutilated; *b*, outer maxilliped; *c*, extremity of leg of last pair, upper view; *d*, *ibid.*, lateral view; *e*, tarsus of same, more enlarged; *f*, caudal stylet.—p. 731.

Fig. 5 *a*. SCYPHAX ORNATUS, enlarged two diameters; *b*, antenna; *U*, part of same, more enlarged; *c*, *c'*, mandible; *d*, *e*, maxillæ; *f*, maxillipeds; *g*, *g'*, lower lip; *h*, *h'*, last pair of thoracic feet, from different specimens; *i*, abdominal appendages of second pair; *k*, *l*, *ibid.*, of third and fourth pairs; *m*, *ibid.*, of fifth pair; *n*, one of sixth pair or caudal stylet, much enlarged; *o*, part of leg of sixth pair; *p*, *ibid.*, of seventh pair.—p. 734.

Fig. 6 *a*. SCYPHAX ORNATUS, jun. (?), animal, enlarged three diameters; *b*, outline of back; *c*, outline of head, in upper view; *d*, abdomen, upper view; *e*, antenna, enlarged; *f*, outer maxilliped; *g*, extremity of one of the legs; *h*, caudal appendages, under view.—p. 735.

Fig. 7 *a*. STYLONISCUS MAGELLANICUS, enlarged three diameters; *b*, antenna; *c*, extremity of same; *d*, maxilliped; *e*, maxilla of second pair; *f*, extremity of leg of seventh pair; *g*, caudal stylet.—p. 736.

Fig. 8 *a*. STYLONISCUS LONGISTYLIS, enlarged four diameters; *b*, part of flagellum of antenna, more enlarged.—p. 737.

## P L A T E 49.

Fig. 1 *a*. LYGIA EHRENBERRII, enlarged one and a half diameters; *b*, abdomen, more enlarged; *c*, to *g*, abdominal appendages of the five pairs in succession.—p. 738.

Fig. 2 *a*. LYGIA NOVI-ZEALANDIÆ, enlarged two and a half diameters; *b*, part of flagellum of antenna, more enlarged; *c*, out-

line of extremity of abdomen; *d*, part of larger seta of stylet.—p. 739.

Fig. 3. LYGIA AUSTRALIENSIS, extremity of abdomen, much enlarged.—p. 740.

Fig. 4 *a*. LYGIA HAWAIIENSIS, enlarged three diameters (mutilated in caudal stylets); *b*, part of basal half of flagellum of antenna; *c*, *ibid.*, from apical half; *d*, extremity of leg of seventh pair; *e*, outline of extremity of abdomen, more enlarged.—p. 740.

Fig. 5 *a*. LYGIA VITIENSIS, outline of extremity of abdomen; *b*, leg of fifth pair.—p. 741.

Fig. 6 *a*. LYGIA GAUDICHAUDII? head and first segment following; *b*, extremity of abdomen; *c*, caudal stylet; *d*, base of antenna; *e*, basal part of flagellum, more enlarged; *f*, apical part of same; *g*, tarsus of leg of sixth or seventh pair; *h*, outline of eye, in lateral view.—p. 741.

Fig. 7 *a*. LYGIA OCCIDENTALIS, abdomen, enlarged; *b*, part of base of antenna; *c*, basal part of flagellum; *d*, apex of same; *e*, tarsus of leg of sixth or seventh pair.—p. 742.

Fig. 8 *a*. LYGIA CURSOR, abdomen, enlarged (stylets wanting); *b*, antenna; *c*, extremity of flagellum, more enlarged.—p. 743.

Fig. 9 *a*. JÆRA PUBESCENS, enlarged ten diameters; *b*, part of flagellum of outer antenna; *c*, extremity of leg; *d*, abdomen.—p. 744.

Fig. 10 *a*. CYMOTHOA EXCISA, enlarged one and a half diameters; *b*, ventral view; *c*, leg of seventh pair; *d*, caudal appendage.—p. 749.

Fig. 11 *a*, *b*. CYMOTHOA EXCISA, var. COMPRESSA.—p. 750.

Fig. 12 *a*. CYMOTHOA FRONTALIS? natural size; *b*, extremity of abdomen.—p. 750.

Fig. 13 *a*. CYMOTHOA RECTA, enlarged two diameters; *b*, leg of fourth pair; *c*, *ibid.*, of fifth pair.—p. 751.

## P L A T E 50.

Fig. 1 *a*. CERATOTHOA LINEARIS, enlarged one and a half diameters; *b*, ventral view; *c*, under view of head; *d*, mandible.—p. 752.

Fig. 2 *a*. CERATOTHOA CRASSA, enlarged one and a half diameters; *b*, stylets, *ibid.*; *U*, same, more enlarged; *c*, leg of sixth pair.—p. 753.

Fig. 3 *a*. LIVONECA LONGISTYLIS, natural size; *b*, caudal appendage.—p. 754.

Fig. 4 *a*. LIVONECA EMARGINATA, natural size; *b*, caudal appendage.—p. 755.

Fig. 5 *a*. LIVONECA LATA, enlarged one and a half diameters; *b*, lateral view, showing fourth, fifth, sixth, and seventh epimerals, left side; *c*, caudal stylet.—p. 756.

Fig. 6 *a*. NEROCILA LATA, natural size; *b*, ventral view; *c*, antenna of first pair; *ibid.*, of second pair.—p. 757.

Fig. 7 *a*. NEROCILA LATIUSCULA, enlarged one and a half diameters; *b*, side view, showing epimerals.—p. 758.

Fig. 8 *a*. NEROCILA BRASILIENSIS, enlarged one and one-third diameters; *b*, antenna of first pair; *c*, *ibid.*, of second pair; *d*, caudal appendage; *e*, side view, showing epimerals.—p. 759.

Fig. 9 *a*. NEROCILA ACULEATA, enlarged one and one-third diameters; *b*, anterior antenna; *c*, caudal stylet.—p. 760.

Fig. 10 *a*. NEROCILA ARMATA, natural size; *b*, under view; *c*, side view; *d*, stylet.—p. 761.

Fig. 11 *a*. NEROCILA TENUIPES, enlarged one and a half diameters; *b*, under view; *c*, side view; *d*, antennæ; *e*, claw of legs; *f*, caudal appendage.—p. 762.

Fig. 12 *a*. ÆGATHOA MACROPHIALMA, enlarged three diameters;



*b*, oblique side view of part of abdomen, showing epimerals; *c*, leg of fifth pair; *d*, leg of seventh pair; *e*, caudal stylet.—p. 764.  
Fig. 13. *ÆGATHOA LATICEPS*, enlarged three diameters.—p. 765.

## P L A T E 51.

Fig. 1 *a*. *ÆGA EFFERATA*, enlarged four diameters; *b*, antennæ; *c*, leg of one of the three anterior pairs; *d*, *ibid.*, of one of the four posterior pairs; *e*, caudal appendage.—p. 766.

Fig. 2 *a*. *ÆGA NOVI-ZEALANDIÆ*, enlarged four diameters; *b*, anterior antenna; *c*, posterior antenna.—p. 767.

Fig. 3 *a*. *ÆGA MULTIDIGITA*, enlarged five diameters; *b*, antennæ; *c*, leg of first pair; *d*, extremity of leg of second pair; *e*, *ibid.*, of third pair; *f*, *ibid.*, of sixth pair.—p. 768.

Fig. 4 *a*. *PTERELAS MAGNIFICUS*, enlarged one and a half diameters; *b*, front view of front; *c*, leg of second pair; *d*, leg of seventh pair; *e*, epimeral of first segment; *f*, *ibid.*, of seventh segment; *g*, caudal appendage.—p. 769.

Fig. 5 *a*. *CIROLANA ARMATA*, anterior extremity of body, much enlarged, the antennæ, except part of basal joint, being concealed beneath; *b*, posterior, *ibid.*; *c*, part of flagellum of second antennæ; *d*, leg of third pair; *e*, leg of sixth or seventh pair.—p. 771.

Fig. 6 *a*. *CIROLANA LATISTYLIS*, abdomen, much enlarged; *b*, part of flagellum of longer antennæ; *c*, leg of third pair.—p. 772.

Fig. 7 *a*. *CIROLANA ORIENTALIS*, anterior extremity of body, much enlarged; *b*, posterior, *ibid.*; *c*, leg of first pair; *d*, *ibid.*, of fifth pair.—p. 773.

Fig. 8 *a*. *CORALLANA HIRTICAUDA*, enlarged three and a half diameters; *b*, head, seen from above (facets of the eyes not indicated); *c*, *ibid.*, seen obliquely from above and forward, showing its actual form and the position of the antennæ; *d*, antennæ (*a*, *a'*), with the epistome (*e*); *e*, extremity of leg of fifth pair.—p. 774.

## P L A T E 52.

Fig. 1. *SPHEROMA GIGAS*, outline of abdomen, under view, much enlarged, New Zealand specimen; 1 *a*, under view of mouth and epistome, of Fuejean specimen, var. *lanceolata*, of White; *b*, mandible, *ibid.*; *c*, extremity of same, in different position; *d*, lower lip, *ibid.*; *e*, maxilla of first pair; *f*, *ibid.*, of second pair.—p. 775.

Fig. 2 *a*. *SPHEROMA CALCAREA*, enlarged one and a half diameters; *b*, mouth and epistome; *c*, inferior antenna.—p. 776.

Fig. 3 *a*. *SPHEROMA CHILENSIS*, enlarged six diameters; *b*, outline of abdomen, under view; *c*, antenna of first pair.—p. 777.

Fig. 4 *a*. *SPHEROMA OREGONENSIS*, enlarged three diameters; *b*, part of antenna of second pair; *c*, outline of abdomen, under view.—p. 778.

Fig. 5 *a*. *SPHEROMA OBTUSA*, enlarged four diameters; *b*, abdomen, under view.—p. 779.

Fig. 6. *SPHEROMA VERRUCAUDA*, outline of abdomen, under view.—p. 779.

Fig. 7. *SPHEROMA ARMATA*, outline of abdomen, under view.—p. 780.

Fig. 8. *a*. *SPHEROMA SPINIGERA*, enlarged three and a half diameters; *b*, under view of antennæ; *c*, abdomen in outline, under view.—p. 780.

Fig. 9 *a*. *SPHEROMA GLOBICAUDA*, enlarged six diameters; *b*, abdomen, more enlarged.—p. 781.

Fig. 10 *a*. *SPHEROMA SAVIGNII*, enlarged six diameters; *b*, part

of flagellum of antenna of second pair; *c*, antenna of first pair; *d*, margin of thoracic segments, much enlarged.—p. 782.

Fig. 11 *a*. *SPHEROMA ORIENTALIS*, enlarged twelve diameters; *b*, part of leg of one of three posterior pairs; *c*, lateral profile of abdomen, showing the abrupt depression on upper side, just behind its middle; *d*, under view.—p. 783.

Fig. 12 *a*. *CASSIDINA LATISTYLIS*, enlarged two diameters; *b*, under view of abdomen; *c*, caudal appendage, upper view; *d*, under view of head; *e*, extremity of leg of fourth pair.—p. 784.

Fig. 13 *a*. *AMPHOROIDEA TYPICA*, enlarged one and a half diameters; *b*, under view of head; *c*, abdomen, under view; *d*, mandible; *d'*, profile of its extremity; *e*, maxilliped.—p. 785.

Fig. 14 *a*. *AMPHOROIDEA AUSTRALIENSIS*, *a*, head, much enlarged; *b*, extremity of abdomen, upper view; *c*, *ibid.*, under view; *d*, basal portion of antennæ of second pair.—p. 789.

## P L A T E 53.

Fig. 1 *a*. *SEROLIS PLANUS*, male, enlarged two diameters; *b*, opercular plates; *c*, part of flagellum of inferior antenna.—p. 794.

Fig. 2 *a*. *LEACHIA NODOSA*, enlarged six diameters; *a'*, same, natural size; *b*, dorsal view; *c*, one of the anterior legs.—p. 795.

Fig. 3 *a*. *TANAIS (PARATANAIS?) BRASILIENSIS*, enlarged six diameters; *b*, eye; *c*, caudal stylet; *d*, antenna of second pair; *e*, leg of first pair; *f*, *ibid.*, of second pair; *g*, *ibid.*, of one of three posterior pairs.—p. 797.

Fig. 4 *a*. *PARATANAIS ELONGATUS*, enlarged twenty diameters; *b*, antennæ; *c*, leg of first pair; *c'*, hand of same; *d*, leg of second pair; *e*, caudal stylet.—p. 799.

Fig. 5 *a*. *LEPTOCHELIA MINUTA*, enlarged sixteen diameters; *b*, same, inside view; *c*, leg of last pair; *d*, caudal stylet.—p. 800.

Fig. 6 *a*. *CRYPTOTHIR MINUTUS*, enlarged; *b*, inner antenna; *c*, outer, *ibid.*; *d*, leg of second pair.—p. 802.

Fig. 7 *a*. *ARGEIA PUGETTENSIS*, male, enlarged twenty-four diameters (length one line); *a'*, extremity of leg; *b*, *c*, female; *d*, leg of fourth pair of female; *d'*, same, in another position; *e*, leg of fifth pair; *e'*, same, in a different position.—p. 804.

## P L A T E 54.

Fig. 1 *a*. *PROTO ELONGATUS*, male, enlarged five diameters; *b*, hand of first pair; *c*, *ibid.*, of second pair; *d*, mandible; *e*, lip; *f*, maxilla of second pair; *g*, maxilliped; *h*, abdomen; *i*, female; *k*, antenna of first pair, *ibid.*—p. 809.

Fig. 2 *a*. *PROTELLA GRACILIS*, male, enlarged two and a half diameters; *a'*, same, natural size, on a coral; *b*, part of flagellum of superior antennæ; *c*, extremity of leg of last pair; *d*, female; *d'*, part of flagellum of superior antenna, *ibid.*; *e*, head of another variety; *f*, hand of second pair in female.—p. 812.

Fig. 3 *a*. *CAPRELLA DILATATA*, enlarged three diameters; *b*, head, side view; *c*, hand of second pair; *d*, abdomen; *e*, part of flagellum of superior antennæ, much enlarged.—p. 813.

Fig. 4 *a*, *b*. *CAPRELLA ROBUSTA*, male, enlarged four diameters; *c*, part of female; *d*, hand of second pair in another specimen; *e*, extremity of leg of fifth pair, much enlarged.—p. 814.

Fig. 5 *a*, *b*. *CAPRELLA CORNUTA*, enlarged four diameters; *c*, part of flagellum of superior antennæ; *d*, third thoracic segment; *e*, hand of first pair; *f*, *ibid.*, of second pair; *g*, extremity of leg of last pair.—p. 816.

Fig. 6. *C. CORNUTA*, var. *OBTUSIROSTRIS*, enlarged five diameters.—p. 817.

## P L A T E 55.

Fig. 1 *a, b*. *CAPRELLA ATTENUATA*, male, enlarged four diameters; *c*, another variety (var. *subtenuis*); *d*, flagellum of superior antenna of same; *e*, extremity of inferior, *ibid.*; *f*, finger of anterior hands; *g*, hand of second pair.—p. 817.

Fig. 2 *a*. *CAPRELLA JANUARI*, male, enlarged two and a half diameters; *b*, female of same? *c*, part of flagellum of superior antenna; *d*, extremity of inferior pair; *e*, hand of second pair; *f*, extremity of leg of last pair.—p. 819.

Fig. 3. *CAPRELLA GLOBICEPS*, enlarged four diameters.—p. 820.

Fig. 4. *ÆGINA? TENELLA*, enlarged four diameters.—p. 822.

Fig. 5 *a*. *ÆGINA? ACULEATA*, enlarged four diameters (fem. of *tenella?*); *b*, part of flagellum of superior antenna.—p. 823.

Fig. 6 *a*. *CLYDONIA GRACILIS*, enlarged eight diameters; *b*, eye.—p. 834.

Fig. 7 *a*. *CLYDONIA LONGIPES*, enlarged five diameters, one antenna and caudal stylets partly mutilated; *b*, outline of front, in vertical view.—p. 835.

Fig. 8. *COROPHIUM? QUADRICEPS*, imperfectly figured, twenty-four diameters.—p. 836.

Fig. 9 *a*. *PLATOPHIUM BRASILIENSE*, male, upper view, enlarged eight diameters; *b*, lateral view, *ibid.*; *c*, flagellum of superior antenna, *ibid.*; *d*, tarsus of one of the six posterior legs; *e*, extremity of abdomen, upper view, *ibid.*; *f*, same, side view:—*g*, female, enlarged eight diameters; *h*, leg of first pair, *ibid.*; *i*, *ibid.*, second pair; *k*, oblique view of hand; *l*, extremity of one of the other legs.—p. 838.

## P L A T E 56.

Fig. 1 *a*. *CYRTOPHIUM ORIENTALE*, lateral view, unfinished, enlarged twelve diameters; *b*, upper view; *c*, leg of seventh pair; *d*, extremity of abdomen, upper view.—p. 840.

Fig. 2 *a*. *CRATOPHIUM VALIDUM*, male, enlarged five diameters; *b*, part of superior antenna, *ibid.*; *c*, leg of first pair, *ibid.*; *d*, leg of fifth pair, *ibid.*; *e*, extremity of abdomen, upper view, *ibid.*; *f*, caudal stylet of last pair and caudal segment, upper view, *ibid.*; *g*, same, side view:—*h*, female; *i*, mandibular palpus, female; *k*, maxillipeds, *ibid.*; *l*, leg of first pair, *ibid.*; *m*, second pair, *ibid.*; *n*, third or fourth pair, *ibid.*; *o*, sixth or seventh pair, *ibid.*—p. 841.

Fig. 3 *a*. *CRATOPHIUM ORIENTALE*, enlarged seven diameters; *b*, hand of second pair.—p. 843.

Fig. 4 *a*. *ICILIUS ELLIPTICUS*, enlarged eight diameters; *b*, abdomen, extended straight; *c*, outline of part of same, side view; *d*, mandible; *e*, maxilla of first pair; *f*, *ibid.*, of second pair; *g*, maxilliped.—p. 844.

Fig. 5 *a*. *ORCHESTIA (TALITRUS?) NOVI-ZEALANDIÆ*, enlarged three diameters; *b*, lower lip; *c*, mandible; *d*, maxilla of first pair; *e*, *ibid.*, of second pair; *f*, maxillipeds; *g*, part of flagellum of antenna of second pair; *h*, extremity of leg of first pair; *i*, *ibid.*, of second pair; *k*, *ibid.*, of third pair; *l*, fifth pair.—p. 852.

Fig. 6 *a*. *ORCHESTIA (TALITRUS?) BREVICORNIS*, antennæ, enlarged; *b*, extremity of second pair; *c*, *ibid.*, of second pair of legs; *d*, *ibid.*, of fourth pair; *e*, *ibid.*, of fifth pair; *f*, *ibid.*, of sixth pair; *g*, stylets of first pair.—p. 854.

## P L A T E 57.

Fig. 1. *ORCHESTIA (TALITRUS) INSCULPTA*: figs. 1 *a* to *m*, male;

*n* to *r*, female.—1 *a*, male, enlarged; *b*, mandible; *c*, maxilla of first pair; *d*, *ibid.*, of second pair; *e*, maxillipeds; *f*, leg of first pair; *g*, hand of second pair; *h*, leg of fifth pair; *i*, side view of head; *k*, front view, *ibid.*; *l*, under view, *ibid.*; *m*, view of lower part of same from behind.—*n*, female, enlarged; *o*, extremity of leg of sixth pair; *p*, *ibid.*, of seventh pair; *p'*, same, more enlarged; *q*, extremity of second pair; *r*, *ibid.*, of first pair.—p. 855.

Fig. 2 *a*. *ORCHESTIA (TALITRUS) BRASILIENSIS*, female, enlarged; *b*, antenna of first pair; *c*, part of flagellum of second pair; *d*, extremity of same, more enlarged; *e*, extremity of leg of second pair; *f*, *ibid.*, of fifth pair; *g*, *ibid.*, of sixth pair; *h*, hand of male.—p. 857.

Fig. 3 *a*. *ORCHESTIA (TALITRUS) PUGETTENSIS*, female, enlarged; *b*, part of flagellum of inferior antennæ; *c*, leg of second pair; *d*, part of leg of sixth or seventh pair.—p. 859.

Fig. 4 *a*. *ORCHESTIA (TALITRUS?) SCABRIPES*, male, enlarged; *b*, extremity of leg of seventh pair.—p. 860.

Fig. 5. *ORCHESTIA (TALORCHESTIA) GRACILIS*: *a* to *f*, female; *g* to *m*, male.—5 *a*, female, enlarged; *b*, portion of flagellum of inferior antenna; *c*, extremity of leg of second pair; *d*, *ibid.*, of third pair; *e*, *ibid.*, of fourth pair; *f*, caudal stylets of fifth pair. *g*, male, enlarged; *h*, extremity of leg of first pair; *i*, hand of second pair; *k*, extremity of leg of third pair; *l*, *ibid.*, of fourth pair; *m*, third pair of stylets and extremity of abdomen.—p. 861.

## P L A T E 58.

Fig. 1 *a*. *ORCHESTIA (TALORCHESTIA?) QUOYANA*, enlarged five diameters; *b*, part of inferior antenna, more enlarged.—p. 863.

Fig. 2 *a*. *ORCHESTIA SCUTIGERULA*, enlarged two and a half diameters, male; *a'*, part of flagellum of inferior antenna, *ibid.*; *b*, mandible, *ibid.*; *c*, *d*, maxillæ, *ibid.*; *e*, maxillipeds, *ibid.*; *f*, leg of first pair, *ibid.*; *g*, *ibid.*, of seventh pair, *ibid.*; *h*, side view of head, of a female; *i*, leg of first pair, *ibid.*; *k*, *ibid.*, of second pair, *ibid.*; *l*, *ibid.*, of seventh pair, *ibid.*; *m*, caudal segment.—p. 863.

Fig. 3 *a*. *ORCHESTIA CAPENSIS*, male, enlarged four diameters; *b*, part of flagellum of outer antenna.—p. 866.

Fig. 4 *a*. *ORCHESTIA CHILENSIS?* enlarged four diameters; *b*, part of flagellum of inferior antenna; *c*, extremity of leg of first pair; *d*, *ibid.*, of second pair; *e*, *ibid.*, of fourth pair.—p. 867.

Fig. 5 *a*. *ORCHESTIA NITIDA*, enlarged five diameters; *b*, part of flagellum of inferior antennæ; *c*, superior antenna; *d*, extremity of leg of first pair; *e*, *ibid.*, of third pair; *f*, *ibid.*, of sixth pair.—p. 868.

Fig. 6 *a*. Female of *ORCHESTIA NITIDA*, part of anterior legs, the extremity mutilated; *b*, second pair; *c*, extremity of hand of second pair; *d*, extremity of leg of sixth pair.—p. 870.

Fig. 7 *a*. *ORCHESTIA SERRULATA*, male, enlarged two and a half diameters; *b, b'*, mandible, in different positions; *c, d*, maxillæ; *e*, maxillipeds; *f*, superior antenna; *g*, part of flagellum of same; *h*, hand of first pair; *i*, hand of second pair; *k*, posterior margin of first joint of seventh pair; *l*, extremity of seventh pair.—*m*, female, part of leg of first pair; *n*, *ibid.*, of second pair; *o*, *ibid.*, of seventh pair.—p. 870.

## P L A T E 59.

Fig. 1 *a*. *ORCHESTIA TENUIS*, enlarged three diameters; *b*, mandible; *b'*, molar prominence of mandible; *c*, maxilla, first pair;

*d*, ibid., second pair; *e*, maxillipeds; *f*, part of flagellum of inferior antenna; *g*, hand of second pair of feet.—p. 872.

Fig. 2 *a*. *ORCHESTIA SYLVICOLA*, enlarged three diameters; *b*, mandible; *c*, *d*, maxillæ; *e*, maxillipeds; *f*, part of flagellum of inferior antennæ; *g*, hand of second pair; *h*, superior antennæ.—p. 873.

Fig. 3 *a*. Male of *ORCHESTIA SYLVICOLA*? enlarged; *b*, side view of head; *c*, part of flagellum of outer antenna; *d*, extremity of leg of first pair; *e*, ibid., of second pair; *f*, ibid., of third pair; *g*, ibid., of seventh pair; *h*, stylet of first pair.—p. 875.

Fig. 4 *a*. *ORCHESTIA SPINIPALMA*, male, enlarged four diameters; *b*, part of flagellum of inferior antenna; *c*, hand of second pair; *d*, extremity of leg of last pair; *e*, ibid., of second pair in female.—p. 875.

Fig. 5 *a*. *ORCHESTIA TAHITIENSIS*, female, enlarged five diameters; *b*, mandible; *c*, *d*, maxillæ; *e*, maxillipeds; *f*, antennæ; *g*, extremity of leg of second pair.—p. 877.

Fig. 6 *a*. *ORCHESTIA DISPAR*, enlarged four diameters; *b*, mandible; *c*, *d*, maxillæ; *e*, maxillipeds; *f*, part of flagellum of inferior antennæ; *g*, hand of first pair; *h*, ibid., of second pair; *i*, leg of seventh pair; *k*, stylet of first pair; *l*, ibid., of last pair; *m*, side view of extremity of abdomen.—p. 878.

Fig. 7 *a*. *ORCHESTIA QUADRIANA*, enlarged three diameters; *b*, part of flagellum of inferior antenna; *c*, maxilla of first pair; *d*, ibid., of second pair; *e*, maxillipeds; *f*, hand of first pair.—p. 879.

Fig. 8 *a*. *ORCHESTIA HAWAIIENSIS*, female, enlarged three diameters; *b*, antenna of first pair; *c*, part of flagellum of antenna of second pair; *d*, extremity of leg of first pair; *e*, ibid., of second pair; *f*, ibid., of seventh pair; *g*, stylet of first pair.—p. 880.

Fig. 9 *a*. *ORCHESTIA PICKERINGII*, male, enlarged four diameters; *b*, antenna of superior pair; *c*, part of flagellum of inferior pair; *d*, extremity of leg of first pair; *e*, ibid., of second pair; *f*, ibid., of seventh pair.—p. 882.

## P L A T E 60.

Fig. 1 *a*. *ALLORCHESTES GAIMARDII*, enlarged four diameters; *b*, mandible; *c*, maxilla of first pair; *d*, ibid., of second pair; *e*, maxillipeds; *f*, flagellum of inferior antennæ; *g*, part of flagellum of superior, ibid.; *h*, extremity of leg of sixth pair; *i*, posterior caudal stylet.—p. 884.

Fig. 2 *a*. *ALLORCHESTES VERTICILLATA*, male, enlarged five diameters; *b*, part of flagellum of second or inferior antenna; *c*, mandible; *d*, maxilla of second pair; *e*, maxillipeds; *f*, extremity of leg of first pair; *g*, ibid., of last pair.—p. 886.

Fig. 3 *a*. *ALLORCHESTES VERTICILLATA* (?), female, enlarged six diameters; *b*, *c*, *d*, *e*, parts of the mouth; *f*, part of flagellum of inferior antenna; *g*, ibid., from another specimen; *h*, part of flagellum of inferior antenna, ibid.; *i*, hand of second pair, ibid.; *k*, extremity of seventh pair, ibid.—p. 887.

Fig. 4 *a*. *ALLORCHESTES HIRTIPALMA*, enlarged five diameters; *b*, part of flagellum of inferior antenna; *c*, *c'*, maxilla, in different positions; *d*, maxilla of second pair; *e*, maxillipeds; *f*, hand of leg of second pair; *g*, ibid., of first pair; *h*, part of leg of sixth pair; *i*, posterior stylet.—p. 888.

Fig. 5 *a*. *ALLORCHESTES GRACILIS*, enlarged three diameters; *b*, part of flagellum of inferior antenna; *c*, hand of leg of first pair; *d*, ibid., of second pair.—p. 889.

Fig. 6 *a*. *ALLORCHESTES HUMILIS*, enlarged six diameters; *b*, mandible; *c*, maxilla of first pair; *d*, ibid., of second pair; *e*, maxillipeds.—p. 890.

Fig. 7 *a*. *ALLORCHESTES AUSTRALIS*, enlarged three and a half diameters; *b*, mandible; *c*, maxilla of first pair; *d*, ibid., of second pair; *e*, maxillipeds; *f*, lower lip; *g*, inferior antenna; *h*, superior, ibid.; *i*, leg of first pair; *k*, ibid., of second pair; *l*, ibid., of fifth pair; *m*, stylet of first pair; *n*, ibid., of second pair; *o*, ibid., of third or last pair.—p. 892.

Fig. 8 *a*. *ALLORCHESTES BREVICORNIS*, enlarged four diameters; *b*, mandible; *c*, maxilla of first pair; *d*, ibid., of second pair; *e*, maxillipeds; *f*, part of flagellum of inferior antenna; *g*, hand of leg of first pair; *h*, ibid., of second pair.—p. 893.

## P L A T E 61.

Fig. 1. *ALLORCHESTES NOVI-ZEALANDIÆ*: 1 *a* to *f*, male; *g* to *v*, female.—1 *a*, enlarged five diameters; *b*, part of flagellum of superior antenna; *c*, ibid., of inferior, ibid.; *d*, hand of leg of first pair; *e*, ibid., of second pair; *f*, part of fifth pair.—*g*, female, enlarged five diameters; *h*, *i*, *k*, *l*, *m*, parts of the mouth; *n*, leg of first pair; *o*, ibid., of second pair; *p*, ibid., of fifth pair; *q*, ibid., of seventh pair; *r*, stylet of first pair; *s*, antennæ of a young female; *t*, part of leg of first pair, ibid.; *u*, ibid., of second pair, ibid.; *v*, ibid., of fifth pair, ibid.—p. 895.

Fig. 2 *a*. *ALLORCHESTES ORIENTALIS*, enlarged six diameters; *b*, mandible; *c*, maxilla of first pair; *d*, ibid., of second pair; *e*, maxilliped; *f*, part of flagellum of superior antenna; *g*, ibid., of inferior, ibid.; *h*, hand of leg of second pair.—p. 898.

Fig. 3 *a*. *ALLORCHESTES* (?) *GRAMINEA*, enlarged three diameters; *b*, leg of sixth pair.—p. 898.

Fig. 4 *a*. *ALLORCHESTES MEDIA*, male, enlarged five diameters; *b*, part of flagellum of superior antenna; *c*, ibid., of inferior, ibid., inner side; *d*, ibid., outer side; *e*, mandible; *f*, maxilliped; *g*, part of leg of first pair, male; *h*, ibid., of second pair; *i*, ibid., of fourth pair; *k*, ibid., of fifth pair; *l*, ibid., of seventh pair; *m*, stylet of posterior pair; *n*, leg of first pair in a smaller specimen.—p. 898.

Fig. 5 *a*. *ALLORCHESTES HAWAIIENSIS*, enlarged six diameters; *b*, part of flagellum of superior antenna; *c*, ibid., of inferior, ibid.; *d*, extremity of maxilliped; *e*, part of leg of first pair; *f*, ibid., of second pair; *g*, ibid., of third or fourth pair; *h*, stylet of first pair.—p. 900.

Fig. 6 *a*. *ALLORCHESTES PUGETTENSIS*, enlarged four diameters; *b*, part of flagellum of inferior antenna; *c*, mandible; *d*, extremity of maxilliped.—p. 901.

## P L A T E 62.

Fig. 1 *a*. *LYSIANASSA*? *BRASILIENSIS*, enlarged seven diameters; *b*, superior antenna; *c*, inferior, ibid.; *d*, leg of third pair; *e*, ibid., of fifth pair; *f*, ibid., of sixth pair.—p. 914.

Fig. 2 *a*. *LYSIANASSA NASUTA*, enlarged four diameters; *b*, head, more enlarged (with *t*, a keel on the front; *m*<sup>3</sup>, maxilliped; *p*, extremity of foot of first pair); *c*, posterior stylets and extremity of abdomen; *d*, *e*, mandible, in different positions; *f*, maxilla of first pair; *g*, ibid., of second pair; *h*, part of leg of first pair; *i*, ibid., of second pair; *k*, ibid., of third pair; *l*, ibid., of fifth pair; *m*, ibid., of seventh pair.—p. 915.

Fig. 3 *a*. *URISTES GIGAS*, enlarged five diameters; *b*, mandible; *c*, *d*, maxillæ; *e*, maxillipeds; *f*, part of flagellum of superior antenna; *g*, ibid., of inferior pair.—p. 917.

Fig. 4 *a*. *ANONYX FUEGIENSIS*, enlarged five diameters; *b*, mandible; *c*, *d*, maxillæ; *e*, maxillipeds; *f*, front view of head (*a'*,



insertion of superior antennæ;  $a^2$ , base of inferior, *ibid.*;  $s$ , spine, adjoining same;  $f$ , piece of shell, below same;  $b'$ , shell of side of head;  $e$ , epistome;  $l'$ , labrum;  $p$ , mandibular palpus;  $md$ , mandible;  $m^3$ , maxillipeds;  $t$ , lamellar processes of basal joints of same;  $g$ , side view of head (lettered like the last, with  $m^1$ , inner maxilla;  $m^2$ , second maxilla;  $l$ , lower lip;  $n, o$ , parts below base of maxillipeds);  $h$ , same, with maxillipeds turned down;  $i$ , spinous process at base of inferior antennæ (same as  $s$ , in figures 4  $f$  and  $g$ );  $k$ , part of flagellum of inferior antenna;  $l$ , *ibid.*, of superior antenna;  $l'$ , longer flagellum of same, from another specimen;  $m$ , part of leg of first pair;  $n$ , *ibid.*, of fourth pair;  $o$ , *ibid.*, of fifth pair;  $p$ , caudal segment.—p. 919.

Fig. 5 *a*. *UROTHOE ROSTRATUS*, enlarged sixteen diameters;  $b$ , upper view of head;  $c$ , part of base of inferior antenna;  $d$ , part of flagellum of same;  $e, e'$ , mandible, in different positions;  $f$ , maxilla of first pair;  $g$ , maxillipeds;  $g'$ , same, more enlarged;  $h$ , leg of second pair;  $i$ , *ibid.*, of third or fourth pair;  $k$ , *ibid.*, of fifth pair;  $l$ , *ibid.*, of sixth pair;  $m$ , *ibid.*, of seventh pair;  $n$ , abdominal natatory;  $o$ , extremity of abdomen, upper view;  $p$ , stylets of second pair.—p. 921.

Fig. 6 *a*. *UROTHOE IRROSTRATUS*, anterior part of body, much enlarged;  $b$ , part of flagellum of inferior antenna;  $c$ , extremity of leg of fourth pair;  $d$ , *ibid.*, of fifth pair;  $e$ , extremity of same;  $f$ , extremity of body.—p. 922.

## P L A T E 63.

Fig. 1. *STENOTHOE VALIDUS*:  $a$  to  $e$ , male;  $f$  to  $o$ , female.—1 *a*, male, enlarged nine diameters;  $b$ , part of flagellum of superior antenna;  $c$ , maxillipeds;  $d$ , leg of first pair;  $e$ , *ibid.*, of sixth pair.— $f$ , female, enlarged nine diameters;  $g$ , mandible;  $h$ , maxilla of first pair;  $i$ , part of maxilla of second pair;  $k$ , maxillipeds;  $l$ , hand of leg of first pair;  $m$ , *ibid.*, of second pair;  $n$ , leg of seventh pair;  $o$ , caudal stylets and extremity of abdomen.—p. 924.

Fig. 2 *a*. *IPHIMEDIA SIMPLEX*, enlarged six diameters;  $b$ , antenna of superior pair;  $c$ , part of flagellum of same, towards extremity;  $d, e$ , mandible, in different positions;  $f$ , inner maxilla;  $g$ , maxillipeds;  $h$ , leg of first pair;  $i$ , *ibid.*, of third pair.—p. 927.

Fig. 3 *a*. *IPHIMEDIA NODOSA*, enlarged six diameters;  $b$ , upper view of head.—p. 928.

Fig. 4 *a*. *IPHIMEDIA FISSICAUDA*, enlarged;  $b, b'$ , views of mandible;  $c, d$ , maxillæ;  $e$ , maxillipeds;  $f$ , caudal extremity;  $g$ , branchia, in outline.—p. 929.

Fig. 5 *a*. *IPHIMEDIA CAPENSIS*, enlarged eight diameters;  $b$ , part of flagellum of superior antenna;  $c$ , part of palpus of mandible;  $d$ , part of leg of first or second pair;  $e$ , *ibid.*, of sixth pair;  $f$ , caudal extremity;  $g$ , stylet of first pair.—p. 931.

Fig. 6 *a*. *IPHIMEDIA PUGETTENSIS*, anterior part of body, much enlarged;  $b$ , mandible;  $b'$ , part of palpus, *ibid.*;  $c$ , part of maxilliped;  $d$ , hand of second pair;  $e$ , third joint of leg of seventh pair;  $f$ , extremity of same leg;  $g$ , caudal extremity.—p. 932.

Fig. 7 *a*. *EDICERUS NOVI-ZEALANDIÆ*, male, enlarged eighteen diameters;  $b$ , mandible;  $c, d$ , maxillæ;  $e$ , extremity of maxilliped;  $f$ , lip;  $g$ , hand of first pair;  $h$ , caudal extremity.—p. 934.

## P L A T E 64.

Fig. 1 *a*. *AMPHITHOE RUBELLA*, enlarged eight diameters;  $b$ , *ibid.*, more enlarged;  $c$ , extremity of leg of sixth pair;  $d$ , extremity of abdomen.—p. 936.

Fig. 2 *a*. *AMPHITHOE ORIENTALIS*, head, enlarged;  $b$ , leg of first pair;  $c$ , *ibid.*, of second pair;  $d$ , *ibid.*, of fourth pair;  $e$ , *ibid.*, of seventh pair;  $f$ , posterior caudal stylet, side view.—p. 937.

Fig. 3 *a*. *AMPHITHOE TONGENSIS*, enlarged five diameters;  $b$ , part of flagellum of superior antenna;  $c$ , *ibid.*, of inferior *ibid.*—p. 939.

Fig. 4 *a*. *AMPHITHOE PEREGRINA*, enlarged seven diameters;  $b$ , eye.—p. 940.

Fig. 5 *a*. *AMPHITHOE BREVIPES*, female, enlarged three diameters;  $b, c$ , side and front views of head ( $a^1, a^2$ , antennæ;  $l'$ , labrum;  $md$ , mandible;  $m^1, m^2$ , maxillæ of first and second pairs;  $m^3$ , maxilliped;  $p$ , mandibular palpus);  $d$ , posterior caudal stylet;  $e$ , mandible;  $f$ , maxilla of first pair;  $g$ , *ibid.*, of second pair;  $h$ , maxilliped;  $i$ , hand of female of first or second pair;  $k$ , extremity of leg of first pair, in male;  $l$ , *ibid.*, of second pair;  $m$ , leg of seventh pair;  $n$ , caudal stylet of first or second pair.—p. 941.

Fig. 6 *a*. *AMPHITHOE BRASILIENSIS*, enlarged four diameters;  $b$ , part of flagellum of superior antennæ;  $c$ , *ibid.*, of inferior *ibid.*, from basal half;  $d$ , *ibid.*, of inferior *ibid.*, from apical half;  $e, e'$ , mandible, in different positions;  $f$ , maxilla of first pair;  $g$ , *ibid.*, of second pair;  $h$ , maxilliped;  $i$ , part of leg of first pair;  $k$ , *ibid.*, of second pair;  $l$ , *ibid.*, of fourth pair;  $m$ , outer branch of first pair of stylets;  $n$ , posterior stylet.—p. 943.

## P L A T E 65.

Fig. 1 *a*. *AMPHITHOE FILICORNIS*, female, enlarged;  $b$ , part of flagellum of superior antenna;  $c$ , mandible;  $d$ , leg of second pair;  $e$ , stylet of posterior pair;  $f$ , head and antennæ of a young individual;  $g$ , leg of fifth pair of same.—p. 944.

Fig. 2 *a*. *GAMMARUS ASPER*, enlarged five diameters, antennæ and posterior feet mutilated;  $b$ , antenna (part) of superior pair;  $c$ , *ibid.*, of inferior pair;  $d$ , part of leg of second pair;  $e$ , part of palpus of mandible.—p. 945.

Fig. 3 *a*. *GAMMARUS SULUENSIS*, enlarged six diameters;  $b, b'$ , mandible, in different positions;  $c, e'$ , inner maxillæ, *ibid.*;  $d$ , maxilla of second pair;  $e$ , maxillipeds;  $f$ , part of flagellum of superior antenna.—p. 947.

Fig. 4 *a*. *GAMMARUS ALBIDUS*, female, enlarged five diameters;  $b, c$ , portions of flagella of antennæ;  $d$ , hand of second pair, in male.—p. 948.

Fig. 5 *a*. *GAMMARUS TENUIS*, enlarged eight diameters;  $b$ , part of palpus of mandible;  $c$ , hand of first pair.—p. 950.

Fig. 6 *a*. *GAMMARUS FURCICORNIS*, enlarged eight diameters;  $b$ , part of flagellum of superior antennæ.—p. 951.

Fig. 7 *a*. *GAMMARUS TENELLUS*, enlarged five diameters;  $b$ , part of flagellum of superior antennæ;  $c$ , hand of first pair;  $d$ , leg of sixth pair;  $e$ , extremity of abdomen, with stylets of first and second pairs.—p. 952.

Fig. 8 *a*. *GAMMARUS FUEGIENSIS*, enlarged six diameters;  $b$ , part of flagellum of first pair;  $c$ , appendage of first pair;  $d$ , extremity of second pair;  $e$ , part of leg of first pair;  $f$ , *ibid.*, of second pair;  $g$ , *ibid.*, of third or fourth pair;  $h$ , caudal extremity, in profile.—p. 954.

Fig. 9 *a*. *GAMMARUS QUADRIMANUS*, enlarged;  $b$ , part of flagellum of superior antenna;  $c$ , extremity of leg of first pair;  $e'$ , same, of size corresponding to 9 *a*;  $d$ , tarsus of leg of fourth pair;  $e$ , leg of seventh pair;  $f$ , stylet of second pair;  $g$ , *ibid.*, of third pair.—p. 955.

Fig. 10 *a*. *GAMMARUS BRASILIENSIS*, male, enlarged eight diameters;  $b$ , part of flagellum of superior antenna;  $c$ , extremity of mandibular palpus;  $d$ , part of leg of fourth pair;  $e$ , hand of

second pair, in female, much enlarged; *e'*, same, magnified to correspond with the figure of the male, 10 *a*.—p. 956.

## P L A T E 66.

Fig. 1 *a*. GAMMARUS PUGETTENSIS, enlarged six or seven diameters; *b*, part of flagellum of superior antenna, with the appendage; *c*, same flagellum, towards apex; *d*, part of flagellum of inferior pair; *e*, leg of second pair; *f*, part of hand, in oblique position; *g*, part of palpus of mandible.—p. 957.

Fig. 2 *a*. GAMMARUS? PERUVIANUS, enlarged six diameters; *b*, mandible, in a position not showing the molar prominence; *c*, maxilla of first pair; *d*, *ibid.*, of second pair; *e*, maxillipeds.—p. 958.

Fig. 3 *a*. GAMMARUS? PUBESCENS, enlarged seven diameters; *b*, mandible; *c*, *d*, maxillæ; *e*, maxillipeds; *f*, lower lip; *g*, leg of first pair.—p. 960.

Fig. 4 *a*. GAMMARUS? INDICUS, female? enlarged seven diameters; *b*, part of flagellum of superior antennæ; *c*, leg of second pair; *d*, extremity of last pair.—p. 961.

Fig. 5 *a*. MELITA TENUICORNIS, male, enlarged four diameters; *b*, *c*, maxillæ; *d*, part of flagellum of inferior antennæ; *e*, leg of first pair; *f*, *ibid.*, of second pair; *g*, female, enlarged four diameters; *h*, part of flagellum of superior antennæ; *i*, *k*, maxillæ; *l*, maxillipeds; *m*, hand of leg of first pair.—p. 963.

Fig. 6 *a*. MÆRA VALIDA, male, enlarged seven diameters; *b*, left hand of second pair; *c*, part of flagellum of superior antennæ.—p. 965.

Fig. 7 *a*. MÆRA SETIPES, male, enlarged seven diameters; *b*, small hand of second pair.—p. 967.

Fig. 8 *a*. MÆRA ANISOCHIR, enlarged eight diameters; *b*, smaller hand of second pair; *c*, leg of first pair in female; *d*, leg of second, *ibid.*; *d'*, same, of size to correspond with 8 *a*.—p. 967.

Fig. 9 *a*. DERCOTHOE EMISSITUS, enlarged six diameters; *b*, head, more enlarged; *c*, portion of flagellum of superior antennæ; *d*, leg of fourth pair; *e*, *ibid.*, of fifth pair.—p. 969.

Fig. 10 *a*. DERCOTHOE EMISSITUS, female? enlarged; *b*, leg of fourth pair; *c*, *ibid.*, of seventh pair; *d*, caudal extremity, showing the three pairs of stylets; *e*, caudal stylet of last pair in profile.—p. 970.

## P L A T E 67.

Fig. 1 *a*. DERCOTHOE SPECULANS, enlarged (appendage to superior antennæ overlooked?); *b*, part of flagellum of superior antennæ; *c*, *ibid.*, of inferior antennæ; *d*, side view of head; *e*, extremity of leg of third or fourth pair; *f*, caudal stylet of last pair; *g*, leg of second pair; *h*, mandible.—p. 971.

Fig. 2. DERCOTHOE? HIRSUTICORNIS, enlarged nine diameters.—p. 972.

Fig. 3 *a*. PYCTILUS MACRODACTYLUS, enlarged; *b*, hand of leg of first pair; *c*, *ibid.*, of second pair.—p. 974.

Fig. 4 *a*. PYCTILUS PUGNAX, hand of second pair, enlarged; *b*, part of mandible; *c*, caudal extremity; *d*, caudal stylet of last pair, in profile.—p. 975.

Fig. 5 *a*. PYCTILUS BRASILIENSIS, enlarged; *b*, leg of first pair; *c*, *ibid.*, of second pair; *d*, *ibid.*, of fifth pair; *e*, *ibid.*, of seventh pair; *f*, caudal extremity; *g*, stylet of second pair; *h*, *ibid.*, of last pair, more enlarged.—p. 976.

Fig. 6 *a*. LESTRIGONUS FERUS, enlarged ten diameters; *b*, abdo-

men, side view; *c*, base of superior antennæ; *d*, maxillipeds.—p. 982.

Fig. 7. L. FERUS? young.—p. 983.

Fig. 8 *a*. LESTRIGONUS FUSCUS, enlarged nine diameters; *b*, base of superior antennæ; *c*, extremity of abdomen, exclusive of stylets of first pair.—p. 983.

Fig. 9 *a*. LESTRIGONUS RUBESCENS, enlarged sixteen diameters; *b*, extremity of abdomen.—p. 984.

Fig. 10 *a*. LESTRIGONUS FABREI? enlarged thirty diameters; *b*, extremity of leg of second pair; *c*, caudal extremity; *d*, head, showing mouth organs in lateral view.—p. 985.

Fig. 11 *a*. HYPERIA AGILIS, enlarged seven diameters; *b*, front view of part of head, in outline; *c*, inferior antenna; *d*, extremity of leg of seventh pair.—p. 986.

Fig. 12 *a*. HYPERIA TRIGONA, enlarged four diameters; *b*, outline of section of thorax; *c*, maxillipeds; *d*, leg of first pair; *e*, *ibid.*, of second pair; *f*, same, in oblique under view; *g*, part of leg of fourth pair; *h*, *ibid.*, of fifth pair; *i*, extremity of abdomen, upper view; *k*, stylets of last pair.—p. 987.

## P L A T E 68.

Fig. 1 *a*. CYCLOPUS MAGELLANICUS, enlarged six diameters; *b*, superior antenna; *c*, inferior, *ibid.*; *d*, mandible; *e*, maxillipeds; *f*, leg of sixth pair, with branchia; *g*, caudal extremity.—p. 990.

Fig. 2 *a*. TAURIA MACROCEPHALA, enlarged three diameters; *b*, same, natural size; *c*, antennæ, as they project from the head; *d*, extremity of leg of first pair; *e*, *ibid.*, of second pair.—p. 988.

Fig. 3 *a*. DAIRA? DEBILIS, enlarged six diameters; *b*, under view of head; *c*, antenna; *d*, leg of second pair; *e*, termination of leg of fourth pair; *f*, fourth pair; *g*, extremity of abdomen.—p. 991.

Fig. 4 *a*. DAIRA? DEPRESSA, enlarged six diameters; *b*, dorsal view; *c*, antenna; *d*, leg of first pair; *e*, *ibid.*, of second pair; *f*, termination of sixth pair; *g*, caudal extremity; *h*, liver.—p. 992.

Fig. 5 *a*. DAIRA INÆQUIPES, enlarged nine diameters; *b*, antenna; *c*, hand of second pair.—p. 993.

Fig. 6 *a*. SYNOPIA ULTRAMARINA, enlarged sixteen diameters; *b*, *U*, mandible, in different views; *c*, leg of first pair; *d*, *ibid.*, of second pair; *e*, *ibid.*, of third pair, and epimeral; *f*, *ibid.*, of fourth pair; *g*, *ibid.*, of fifth pair; *h*, *ibid.*, of seventh pair.—p. 995.

Fig. 7 *a*. S. ULTRAMARINA? male; *b*, upper view of head; *c*, basal portions of antennæ; *d*, terminal stylets; *e*, stylet of first pair.—p. 997.

Fig. 8 *a*. SYNOPIA ANGUSTIFRONS, enlarged sixteen diameters; *b*, upper view of head; *c*, superior antenna; *d*, leg of second pair.—p. 998.

Fig. 9 *a*. ANCHYLOMERA PURPUREA, enlarged fifteen diameters; *b*, front view of head; *c*, maxilla of first pair; *d*, *ibid.*, of second pair; *e*, base of superior antenna; *f*, *ibid.*, of inferior *ibid.*; *g*, leg of first pair; *h*, *ibid.*, of second pair; *i*, *ibid.*, of third pair; *k*, *ibid.*, of fourth pair; *l*, abdominal leg; *m*, caudal extremity.—p. 1001.

Fig. 10 *a*. ANCHYLOMERA THYROPODA, enlarged fifteen diameters; *b*, front view of head; *c*, antenna; *d*, maxilla; *e*, leg of sixth pair; *f*, *ibid.*, of seventh pair; *g*, caudal extremity.—p. 1004.

## P L A T E 69.

Fig. 1 *a*. THEMISTO ANTARCTICA, enlarged three diameters; *b*,

front view of head in outline; *c*, superior antenna; *d*, inferior, ibid.; *e*, caudal extremity.—p. 1005.

Fig. 2 *a*. *PHORCUS HYALOCEPHALUS*, enlarged eight diameters; *b*, antenna; *c*, caudal extremity.—p. 1006.

Fig. 3 *a*, *b*. *DITHYRUS FABIA*, enlarged four diameters; *c*, ventral view, part of organs omitted, and showing three posterior coxæ of one size thrown back; *d*, front view of head; *e*, antenna; *f*, maxillipeds; *g*, leg of first pair; *h*, ibid., of second pair; *i*, ibid., of third or fourth pair; *k*, abdominal natatories; *l*, caudal segment, under view; *m*, stylets of first pair.—p. 1010.

Fig. 4 *a*. *THYROPUS DIAPHANUS*, enlarged ten diameters; *b*, same, dorsal view, enlarged five diameters; *c*, inner antenna; *d*,

outer, ibid.; *e*, leg of third or fourth pair; *f*, caudal segment, under view; *g*, stylet of first pair.—p. 1013.

Fig. 5 *a*. *PRONOE BRUNNEA*, enlarged six diameters; *b*, dorsal view, enlarged four diameters; *c*, inner antenna; *d*, outer, ibid.; *e*, leg of third or fourth pair; *f*, ibid., of fifth pair; *g*, ibid., of sixth pair; *h*, ibid., of seventh pair; *i*, caudal extremity; *k*, *k'*, branches of first pair of stylets.—p. 1015.

Fig. 6 *a*. *LYCÆA OCHRACEA*, enlarged five diameters; *b*, head, in upper view; *c*, inner antenna; *d*, outer antenna; *e*, mandible; *f*, leg of first pair; *g*, ibid., of second pair; *h*, caudal extremity.—p. 1017.

### III. ENTOMOSTRACA.

#### PLATE 70.

##### STRUCTURE OF CYCLOPOIDEA.

Figs. 1–8. Body:—1 *a*. *Calanus*; 1 *b*. *Cyclops*; 1 *c*. *Catopia*; 2. *Laophon*; 3. *Calanus*; 4. *Euchaeta*; 5. *Pontella*; 6. *Corycæus*; 7. *Sapphirina*; 8. *Setella*.

Figs. 9–15. Head and eyes:—9 *a*, *b*. *Pontella*; 10. *Catopia*; 11. *Euchaeta*; 12. *Setella*; 13. *Calanus sanguineus*; 14 *a*, *b*. *Pontella*; 15. *Corycæus*.

Figs. 16–43. Anterior antennæ:—16. *Corycæus*; 17. *Sapphirina*; 18 *a*, *b*, 19, 20. *Cyclops*; 21. *Calanus*; 22, 23, 24. *Euchaeta*; 25. *Undina*; 26 to 36. *Pontella*; 37, 38. *Candace*; 39, 40. *Oithona*; 41. *Acartia*; 42 *a*, *b*. *Clytemnestra*; 43. *Setella*.

Figs. 44–55. Posterior antennæ:—44. *Cyclops*; 45. *Setella*; 46. *Sapphirina*; 47. *Corycæus*; 48. *Oithona*; 49. *Harpacticus*; 50. *Euchaeta*; 51, 52, 53. *Calanus*; 54. *Pontella*; 55. *Candace*.

#### PLATE 71.

##### STRUCTURE OF CYCLOPOIDEA.

Figs. 56–63. Mandibles:—56, from a *Sapphirina*; 57 *a*, *b*, 58. *Calanus*; 59. *Euchaeta*; 60, 61, 61 *a*. *Pontella*; 62. *Harpacticus*; 63. *Oithona*.

Figs. 64–73. Maxillæ:—64. *Corycæus*; 65. *Sapphirina*; 66. *Euchaeta*; 67, 68, 69. *Calanus*; 70, 71, 72. *Pontella*; 73. *Oithona*; 73 bis. *Candace*.

Figs. 74–81. Maxillipeds:—74 *a*, *b*. *Sapphirina*; 75 *a*, *b*. *Corycæus*; 76. *Harpacticus*; 77. *Pontella*; 78. *Euchaeta*; 79. *Oithona*; 80, 81. *Candace*.

Figs. 82–92. First pair of legs:—82. *Calanus*; 83. *Euchaeta*; 84, 85, male *Corycæus*; 86. *Setella*; 87, female *Corycæus*; 88. *Cyclops*; 89. *Cyclops*; 90. *Pontella*; 91, 92. *Oithona*.

Figs. 93–100. Posterior legs:—93. *Calanus*; 94. *Acartia*; 95, female *Pontella detruncata*; 96, male, same *Pontella*; 97, 98, male *Pontellæ*; 99, male *Candace pachydaetyla*; 100, male *Euchaeta*.

Figs. 101–114. Abdomen and caudal lamellæ:—101. *Calanus* or *Pontella*; 102, 104. *Calanus*; 103. *Euchaeta*; 105, 106. *Cyclops*; 107. *Harpacticus*; 108. *Oithona*; 109, 110. *Setella*; 111. *Corycæus*; 112, 113, 114. *Sapphirina*.

Fig. 115. *Thyone*; 116, 120. *Notodelphys* of Allman.

#### PLATE 72.

Fig. 1 *a*. *CALANUS ROTUNDATUS*, enlarged; *b*, extremity of anterior antenna; *c*, side view, showing alimentary canal, *i*, *i*, and heart, *h*; *d*, young, possibly of this species.—p. 1049.

Fig. 2 *a*. *CALANUS COMPTUS*, enlarged; *b*, extremity of anterior antenna; *c*, abdomen, in profile.—p. 1050.

Fig. 3 *a*. *CALANUS NUDUS*, enlarged; *b*, antenna of second pair.—p. 1052.

Fig. 4 *a*. *CALANUS MAGELLANICUS*, enlarged; *b*, natural position of anterior antennæ; *c*, extremity, ibid.—p. 1053.

Fig. 5. *CALANUS CRASSUS*, enlarged.—p. 1054.

Fig. 6 *a*. *CALANUS FURCAUDUS*, enlarged; *b*, extremity of anterior antenna; *c*, profile of abdomen.—p. 1055.

Fig. 7 *a*. *CALANUS ARCUICORNIS*, enlarged; *b*, extremity of anterior antennæ.—p. 1056.

Fig. 8. *CALANUS TURBINATUS*, enlarged.—p. 1057.

Fig. 9. *CALANUS STYLIFER*, enlarged.—p. 1058.

Fig. 10. *CALANUS CURTUS*, enlarged.—p. 1059.

Fig. 11 *a*. *CALANUS SCUTELLATUS*, enlarged; *b*, extremity of antenna.—p. 1060.

Fig. 12 *a*. *CALANUS PAVO*, enlarged; *b*, antenna of second pair.—p. 1061.

#### PLATE 73.

Fig. 1 *a*. *CALANUS LÆVIS*, enlarged; *b*, extremity of anterior antenna.—p. 1062.

Fig. 2 *a*. *C. LÆVIS*, another individual; *b*, extremity of superior antenna; *c*, posterior antenna; *d*, leg of first pair.—p. 1062.

Fig. 3 *a*. *CALANUS MEDIUS*, enlarged; *b*, extremity of anterior antenna.—p. 1063.

Fig. 4. *CALANUS PLACIDUS*, enlarged.—p. 1064.

Fig. 5 *a*. *CALANUS RECTICORNIS*, enlarged; *b*, extremity of anterior antenna.—p. 1064.

Fig. 6 *a*. *CALANUS SETULIGERUS*, enlarged; *a'*, side view, showing alimentary cavity, *i*, heart, *h*; *b*, antenna of second pair; *c*, leg of first pair; *d*, natatory leg of second or third pair.—p. 1065.



Fig. 7. *CALANUS PELLUCIDUS*, enlarged.—p. 1067.

Fig. 8 *a*. *CALANUS AFFINIS*, enlarged; *b*, abdomen of another individual; *c*, extremity of anterior antenna of another specimen.—p. 1067.

Fig. 9 *a*. *CALANUS FLAVIPES*, enlarged; *b*, extremity of anterior antenna.—p. 1068.

Fig. 10 *a*. *CALANUS TENUICORNIS*, enlarged; *b*, extremity of anterior antenna.—p. 1069.

Fig. 11 *a*. *CALANUS SANGUINEUS*, enlarged; *b*, extremity of anterior antenna.—p. 1070.

Fig. 12 *a*. *C. SANGUINEUS*?—p. 1071.

#### PLATE 74.

Fig. 1 *a*. *CALANUS SANGUINEUS*, var. *PERSPICAX*, enlarged; *b*, eyes; *c*, extremity of antennæ of first pair.—p. 1071.

Fig. 2 *a*. *CALANUS MUNDUS*, enlarged; *b*, extremity of antenna of first pair.—p. 1071.

Fig. 3 *a*. *CALANUS INAURITUS*, enlarged; *b*, base of antenna; *c*, extremity of same.—p. 1072.

Fig. 4 *a*. *CALANUS SIMPLICICAUDUS*, enlarged; *b*, extremity of antenna.—p. 1073.

Fig. 5 *a*. *CALANUS APPRESSUS*, enlarged; *b*, extremity of antenna; *c*, caudal stylets and seta of another individual.—p. 1074.

Fig. 6. *CALANUS APPRESSUS*, antenna of monstrous growth.—p. 1075.

Fig. 7. *CALANUS COMMUNIS*, enlarged.—p. 1076.

Fig. 8 *a*. *CALANUS AMENUS*, enlarged; *b*, extremity of antenna.—p. 1076.

Fig. 9 *a*. *CALANUS BELLUS*, enlarged (legs not figured); *b*, extremity of antenna.—p. 1077.

Fig. 10. *CALANUS GRACILIS*, enlarged.—p. 1078.

#### PLATE 75.

Fig. 1 *a*. *CALANUS ELONGATUS*, enlarged (caudal stylets in part mutilated); *a'*, same, natural size; *b*, under view, much enlarged.—p. 1079.

Fig. 2 *a*. *CALANUS ATTENUATUS*, enlarged; *a'*, extremity of antenna of first pair; *b*, mandible; *b'*, process of same, in another position; *c*, maxilla; *d*, under view, more enlarged; *e*, dorsal view, showing nerves, to the antennæ (*a*), that to the eyes (*e*), and the glands over the stomach, which are ovarian or spermatie, and *m*, a muscle, moving the abdomen.—p. 1080.

#### PLATE 76.

Fig. 1 *a*. *RHINCALANUS ROSTRIFRONS*, enlarged seventeen diameters; *b*, another individual.—p. 1082.

Fig. 2 *a*. *RHINCALANUS CORNUTUS*, enlarged thirteen diameters; *a'*, profile of front; *b*, maxilla; *c*, natatory leg; *d*, outline of heart.—p. 1083.

Fig. 3. *CALANUS*, young.

Fig. 4 *a*. *OITHONA PLUMIFERA*, enlarged forty-eight diameters; *a'*, position of the antennæ in a specimen collected in latitude 1° south, 30½° west; *b*, part of posterior antenna; *c*, maxillipeds; *d*, anterior feet; *e*, natatory leg.—p. 1099.

Fig. 5 *a*. *OITHONA ABBREVIATA*, enlarged fifty-four diameters; *b*, maxilliped.—p. 1100.

Fig. 6 *a*. *OITHONA SETIGER*, enlarged fifty diameters; *a'*, extremity of anterior antennæ; *b*, posterior antenna; *c*, mandible (not in its normal position); *d*, maxilla; *e*, maxilliped; *f*, anterior leg.—p. 1101.

#### PLATE 77.

Fig. 1 *a*. *EUCILETA COMMUNIS*, female, enlarged eighteen diameters; *b*, mandible; *c*, maxilla; *d*, maxilliped.—p. 1086.

Fig. 2 *a*. *EUCILETA COMMUNIS*, male, enlarged thirteen diameters; *a'*, upper view of front; *b*, antenna of second pair; *c*, one of the natatory legs; *d*, *e*, legs of posterior pair.—p. 1086.

Fig. 3. *EUCILETA COMMUNIS*? young.—p. 1088.

Fig. 4 *a*. *EUCILETA CONCINNA*, female, enlarged twenty diameters; *b*, abdomen of another specimen.—p. 1088.

Fig. 5 *a*. *EUCILETA CONCINNA*, male, enlarged twenty diameters; *b*, feet of posterior pair; *c*, one of them in different position.—p. 1088.

Fig. 6 *a*. *EUCILETA PUBESCENS*, enlarged seventeen diameters; *a'*, beak, in profile; *b*, antenna of second pair; *c*, mandible; *d*, lip; *e*, maxilla; *f*, maxilliped; *g*, anterior feet.—p. 1090.

Fig. 7 *a*. *EUCILETA DIADEMA*, female, enlarged fourteen diameters; *b*, maxilliped; *c*, anterior feet; *d*, posterior thoracic feet of female; *e*, an appendage, attached below to abdomen near its base in some individuals.—p. 1091.

Fig. 8 *a*. *UNDINA VULGARIS*, enlarged twenty-one diameters; *b*, extremity of anterior antenna; *c*, right foot of last pair; *d*, profile of cephalothorax; showing elementary cavity and genital system, with the beak in profile.—p. 1092.

Fig. 9 *a*. *UNDINA SIMPLEX*, enlarged thirty diameters; *b*, extremity of superior antenna.—p. 1094.

Fig. 10 *a*. *UNDINA* ———? anterior antenna; *b*, posterior ibid.; *c*, leg of first pair; *d*, right leg of last pair; *e*, profile of body, showing alimentary cavity; *f*, abdomen.—p. 1095.

Fig. 11 *a*. *UNDINA INORNATA*, enlarged eighteen diameters; *b*, extremity of anterior antennæ; *c*, natatory of second pair.—p. 1095.

#### PLATE 78.

Fig. 1 *a*. *CANDACE ORNATA*, enlarged; *b*, antenna of second pair; *c*, palpus of mandible; *d*, maxilla; *e*, maxilliped; *f*, one of the natatories.—p. 1111.

Fig. 2 *a*. *CANDACE PACHYDACTYLA*, male, enlarged; *b*, right foot of posterior pair.—p. 1113.

Fig. 3 *a*. Female of *CANDACE PACHYDACTYLA*? *b*, extremity of antenna of anterior pair.—p. 1114.

Fig. 4 *a*. *CANDACE PACHYDACTYLA*?—p. 1114.

Fig. 5 *a*. *CANDACE ETHIOPICA*, male, enlarged; *a'*, extremity of antenna of anterior pair; *b*, geniculating joint of same; *c*, eyes and pigment; *d*, maxillipeds; *e*, leg of first pair; *f*, posterior thoracic feet, the right in front.—p. 1115.

Fig. 6 *a*. *CANDACE CURTA*, enlarged; *a'*, extremity of antenna; *b*, maxilliped; *c*, right leg of posterior pair (not quite complete); *d*, left, ibid.—p. 1116.

Fig. 7 *a*. *CANDACE AUCTA*, female, enlarged; *b*, extremity of antenna.—p. 1117.

Fig. 8 *a*. *CANDACE TRUNCATA*, female, enlarged; *a'*, extremity of antenna; *b*, maxilliped; *c*, leg of posterior thoracic pair; *d*, profile of abdomen.—p. 1118.

Fig. 9. *HEMICALANUS LONGICORNIS*, enlarged.—p. 1104.

Fig. 10 *a*. *HEMICALANUS CALANINUS*, enlarged; *b*, extremity of antenna.—p. 1105.

Fig. 11 *a*. *HEMICALANUS TENUICORNIS*, enlarged; *b*, extremity of antenna.—p. 1106.

Fig. 12 *a*. *HEMICALANUS GRACILIS*, enlarged; *b*, extremity of antenna.—p. 1108.

## P L A T E 79.

Fig. 1 *a*. *CATOPIA FURCATA*, enlarged; *a'*, side view of head, more enlarged; *b*, extremity of left antenna; *c*, geniculating part of right, enlarged; *d*, basal portion of antenna, showing short spines.—p. 1173.

Fig. 2 *a*. *ACARTIA LIMPIDA*, enlarged; *b*, leg of posterior thoracic pair.—p. 1119.

Fig. 3 *a*. *ACARTIA NEGLIGENS*, enlarged; *b*, posterior part of body, in profile; *c*, antenna of second pair.—p. 1121.

Fig. 4 *a*. *ACARTIA TONSA*, enlarged; *a'*, extremity of antenna of anterior pair; *b*, antenna of posterior pair; *c*, palpus of mandible; *d*, maxilla; *e*, maxilliped; *f*, feet of first pair; *g*, eyes.—p. 1122.

Fig. 5 *a*. *ACARTIA LAXA*, enlarged; *b*, outline of head, in upper view; *c*, pair of posterior thoracic appendages or legs.—p. 1123.

Fig. 6 *a*. *CALANOPIA ELLIPTICA*, enlarged; *b*, extremity of antenna.—p. 1132.

Fig. 7 *a*. *CALANOPIA BRACHIATA*, male, enlarged; *b*, posterior thoracic feet, more enlarged.—p. 1133.

Fig. 8 *a*. Female of *C. BRACHIATA*? *b*, extremity of antenna.—p. 1134.

Fig. 9 *a*. *C. BRACHIATA*? front of male; *b*, posterior extremity of body, caudal setae excluded; *c*, right antenna; *d*, extremity of antenna; *e*, right foot of posterior pair; *f*, one of female feet corresponding; *g*, female abdomen distorted.—p. 1134.

Fig. 10 *a*. *PONTELLINA PLUMATA*, female, enlarged; *b*, maxilliped; *c*, one of the natatories; *d*, leg of posterior thoracic pair.—p. 1135.

Fig. 11 *a*. *PONTELLINA TURGIDA*, enlarged; *b*, extremity of antenna.—p. 1136.

Fig. 12 *a, b*. *P. TURGIDA*, another variety.—p. 1137.

## P L A T E 80.

Fig. 1 *a*. *PONTELLINA CURTA*, enlarged; *b*, extremity of antenna.—p. 1138.

Fig. 2 *a*. *PONTELLINA CONTRACTA*, enlarged; *b*, side view of beak; *c*, extremity of antenna.—p. 1139.

Fig. 3. *PONTELLINA CONTRACTA*.—p. 1140.

Fig. 4 *a, b*. *P. CONTRACTA*?—p. 1140.

Fig. 5 *a*. *PONTELLINA MEDIA*, enlarged; *b*, extremity of antenna.—p. 1141.

Fig. 6 *a*. *PONTELLINA CRISPATA*, enlarged; *b*, extremity of antenna.—p. 1142.

Fig. 7 *a*. *PONTELLINA DETRUNCATA*, male, enlarged; *a'*, part of male right antenna, anterior pair; *b*, profile of head; *c*, maxillipeds (magnified twice as much as fig. 7 *a*); *d*, anterior feet; *e*, posterior thoracic feet, in male; *f*, *ibid.*, in female; *g*, under view, showing organs of head and mouth; *h, i*, different views of a distorted female abdomen.—p. 1143.

Fig. 8 *a*. *PONTELLINA SIMPLEX*, enlarged; *b*, posterior antenna.—p. 1145.

Fig. 9 *a*. *PONTELLINA EXIGUA*, enlarged (antennae removed); *b*, profile, showing outline of head.—p. 1146.

Fig. 10 *a*. *PONTELLINA AGILIS*, enlarged; *b*, side view of head; *c*,

posterior antenna; *d*, natatory of third pair; *e*, leg of last pair.—p. 1147.

Fig. 11 *a*. *PONTELLINA ACUTIFRONS*, enlarged; *a'*, extremity of antenna; *b*, male right antenna; *c*, side view of head; *d*, mandible and palpus; *e*, maxilla; *f*, leg of first pair; *g*, leg of last pair; *h*, natatory leg of one of three posterior pairs.—p. 1149.

Fig. 12 *a*. *PONTELLINA ACUTA*, male, enlarged; *a'*, part of head, in profile; *b*, right male antenna; *c*, feet of last pair.—p. 1150.

Fig. 13 *a*. *PONTELLINA RUBESCENS*, enlarged; *b*, extremity of antenna.—p. 1152.

Fig. 14 *a*. *PONTELLINA EMERITA*, enlarged (one joint of antennae probably wanting at extremity); *b*, posterior feet.—p. 1153.

## P L A T E 81.

Fig. 1 *a*. *PONTELLINA REGALIS*, enlarged; *b*, extremity of antenna.—p. 1154.

Fig. 2 *a*. *PONTELLINA PERSPICAX*, enlarged; *b*, one of six posterior natatories; *c*, right leg of last pair; *d*, left, *ibid.*—p. 1155.

Fig. 3 *a*. *PONTELLINA PULCHRA*, enlarged; *b*, side view of head; *c*, posterior antenna; *d*, natatory leg; *e*, right leg of last pair; *f*, left, *ibid.*—p. 1157.

Fig. 4 *a*. *PONTELLINA STRENUA*, enlarged; *a'*, extremity of left antenna; *b*, part of right male antenna; *c*, profile of head; *d*, feet of last pair.—p. 1158.

Fig. 5 *a*. *PONTELLINA PROTENSA*, enlarged; *a'*, extremity of antenna; *b*, posterior part of cephalothorax in one specimen.—p. 1159.

Fig. 6 *a*. *PONTELLA HEBES*, enlarged; *a'*, view of front and base of antennae; *b*, eyes.—p. 1160.

Fig. 7. *PONTELLA FRIVOLA*, enlarged.—p. 1161.

Fig. 8 *a*. *PONTELLA HEBES*? male; *a'*, extremity of antenna.—p. 1162.

Fig. 9 *a*. *PONTELLA DETONSA*, enlarged; *b*, profile of head; *c*, extremity of left antenna in male, or of either in female; *d*, probably right male antenna, of another specimen; *e*, front view of beak; *f*, mandible and palpus; *g*, maxilla; *h*, maxilliped; *i*, upper view of head, in another specimen.—p. 1163.

Fig. 10 *a*. *P. DETONSA*, another specimen; *a'*, extremity of antenna.—p. 1163.

Fig. 11 *a*. *PONTELLA ARGENTEA*, enlarged; *a'*, extremity of antenna; *b*, base of same; *c*, beak, nearly in profile; *d*, under view of inferior eyes.—p. 1164.

## P L A T E 82.

Fig. 1 *a*. *PONTELLA SPECIOSA*, enlarged; *a'*, profile of head, in some individuals; *b*, posterior feet, enlarged two diameters more than figure *a*; *c*, extremity of thorax and abdomen in some small individuals.—p. 1166.

Fig. 2 *a, a'*. *PONTELLA SPECIOSA*, var. *FORMOSA*, enlarged.—p. 1167.

Fig. 3 *a, a'*. *PONTELLA DETONSA*? enlarged.—p. 1164.

Fig. 4 *a*. *PONTELLA PRINCEPS*, enlarged; *a'* (right hand upper corner of Plate), extremity of antenna; *b*, beak, in profile; *c*, posterior part of cephalothorax and abdomen, in profile.—p. 1168.

Fig. 5 *a*. *PONTELLA FERA*, enlarged; *a'*, extremity of female antenna; *b* (over fig. 5 *c*), part of male antenna; *c*, profile of head; *d* (over 5 *a*), front view of beak; *e*, abdomen of a male; *f*, profile of a female abdomen; *g*, another female abdomen, upper view; *h*, lips; *i*, mandible; *j* (right of 5 *a*), another view

of mandible and its palpus; *k*, maxilla; *l*, right posterior foot.—1169.

Fig. 6 *a*. *PONTELLA VALIDA*, showing beak, in profile; *b*, right antenna of male; *c*, part of same, more enlarged; *d*, natatory of first pair; *e*, *ibid.*, of fourth pair; *f*, posterior legs of male; *g*, abdomen of a male, abnormal form.—p. 1171.

## P L A T E 83.

Fig. 1 *a*. *CYCLOPS BRASILIENSIS*, male, enlarged; *b*, lateral view, showing beak and alimentary canal; *c*, antenna of second pair; *d*, extremity of maxilliped, leg of first pair; *e*, natatory leg; *f*, antenna of female; *g*, abdomen, with external ovarian sacs of female.—p. 1181.

Fig. 2 *a*. *CYCLOPS CURTICAUDUS*, female, enlarged; *b*, extremity of antenna of anterior pair; *c*, *ibid.*, of posterior pair; *d*, *ibid.*, of maxilliped or leg of first pair.—p. 1182.

Fig. 3 *a*. *CYCLOPS PUBESCENS*, male, enlarged; *b*, antenna of female; *c*, caudal setæ, more magnified; *d*, ovarian sac.—p. 1183.

Fig. 4 *a*. *CYCLOPS MACLEAYI*, female, enlarged; *b*, extremity of antenna of anterior pair.—p. 1184.

Fig. 5 *a*. *CYCLOPS VITIENSIS*, female, enlarged; *b*, extremity of antenna.—p. 1185.

Fig. 6 *a*. *CANTHOCAMPTUS VIRESCENS*, female, enlarged; *a'*, eyes; *b*, antenna of anterior pair, of female; *c*, antenna of posterior pair; *d*, mandible, without the palpus; *e*, part of maxilliped; *f*, natatory leg; *g*, foot of first pair; *h*, *ibid.*, of second pair; *h'*, extremity of longer branch; *i*, young animal, a day or two old.—1186.

Fig. 7 *a*. *HARPACTICUS CONCINNUS*, female, enlarged; *b*, extremity of antenna of posterior pair (?); *c*, extremity of a maxilliped or palpus of mandible (?); *d*, foot of first pair; *e*, *ibid.*, of second pair; *f*, external ovarian sac.—p. 1189.

Fig. 8 *a*. *HARPACTICUS SACER*, male, enlarged; *b*, eyes; *c*, hand of antenna of anterior pair, in male; *c'*, antenna of female; *d*, extremity of antenna of posterior pair; *e*, leg of first pair; *f*, *ibid.*, of second pair.—p. 1191.

Fig. 9 *a*. *CANTHOCAMPTUS LINEARIS*, female, enlarged; *b*, antenna.—p. 1188.

Fig. 10. *CANTHOCAMPTUS ROSEUS*, female, enlarged.—p. 1189.

Fig. 11 *a*. *HARPACTICUS? ACUTIFRONS*, male, enlarged; *b*, extremity of a maxilliped, or the mandibular palpus (?).—p. 1192.

Fig. 12 *a*. *CLYTEMNESTRA SCUTELLATA*, enlarged; *b*, eyes; *c*, antenna of posterior pair; *d*, extremity of a maxilliped; *e*, cheliform legs (first pair of legs); *f*, leg of one of the natatory pairs.—p. 1194.

## P L A T E 84.

Fig. 1 *a*. *SETELLA TENUICORNIS*, enlarged; *a'*, beak, with its appendages; *b*, base of one of anterior antennæ; *c*, one of posterior antennæ; *g*, leg of first pair; *i*, *k*, natatory legs; *l*, *m*, young *Setellæ*.—p. 1196.

Fig. 2 *a*. *SETELLA LONGICAUDA*, enlarged; *a'*, appendage to beak.—p. 1197.

Fig. 3 *a*, *b*. *SETELLA GRACILIS*, enlarged; *c*, beak appendage; *d*, extremity of a maxilla, imperfectly seen; *e*, leg of first pair; *f*, abdominal appendages; *g*, part of caudal setæ, showing spinous character of.—p. 1198.

Fig. 4 *a*. *SETELLA CRASSICORNIS*, enlarged; *a'*, profile of head;

*b*, one of anterior antennæ; *c*, extremity of posterior, *ibid.*; *d*, leg of first pair; *e*, abdomen, in profile, showing abdominal appendages beneath.—p. 1199.

Fig. 5 *a*. *SETELLA ACICULUS*, female, enlarged; *a'*, profile of head; *b*, one of anterior antennæ; *c*, *ibid.*, of posterior, *ibid.*; *d*, leg of first pair; *e*, *ibid.*, of second pair; *f*, bag of eggs; *g*, *g'*, abdomen.—p. 1200.

## P L A T E 85.

Fig. 1 *a*, *a'*. *CORYCÆUS GRACILIS*, enlarged; *b*, anterior antenna; *c*, posterior *ibid.*; *d*, natatory of second or third pair.—p. 1207.

Fig. 2 *a*, *a'*. *CORYCÆUS DECURTATUS*, enlarged; *b*, anterior antenna; *c*, posterior, *ibid.*—p. 1208.

Fig. 3 *a*. *CORYCÆUS DEPLUMATUS*, enlarged; *b*, natatory leg.—p. 1210.

Fig. 4 *a*, *b*. *CORYCÆUS VARIUS*, enlarged; *c*, side view of abdomen; *d*, anterior antenna; *e*, posterior, *ibid.*; *f*, natatory leg of first pair; *g*, *ibid.*, of fourth pair; *h*, eggs, pressed from the body; *i*, leg of first pair.—p. 1211.

Fig. 5 *a*, *b*. *CORYCÆUS LONGISTYLIS*, enlarged; *c*, posterior antenna; *d*, maxilla and anterior foot.—p. 1212.

Fig. 6. *CORYCÆUS OBTUSUS*, enlarged.—p. 1214.

Fig. 7 *a*, *b*. *CORYCÆUS CRASSIUSCULUS*, enlarged.—p. 1214.

Fig. 8 *a*, *b*. *CORYCÆUS LATICEPS*, enlarged; *c*, natatory leg.—p. 1215.

Fig. 9 *a*, *b*. *CORYCÆUS VITREUS*, enlarged; *c*, anterior antennæ; *d*, anterior legs.—p. 1216.

Fig. 10 *a*, *b*. *CORYCÆUS AGLIS*, enlarged.—p. 1217.

Fig. 11 *a*, *b*. *CORYCÆUS ORIENTALIS*, enlarged; *c*, posterior antenna.—p. 1218.

Fig. 12 *a*, *a'*. *CORYCÆUS LAUTUS*, enlarged; *b*, posterior antenna; *c*, two pairs of maxillæ; *d*, maxillæ and maxillipeds and anterior feet, in position (nearly); *e*, extremity of natatory leg.—p. 1219.

## P L A T E 86.

Fig. 1 *a*. *CORYCÆUS SPECIOSUS*, enlarged; *b*, abdomen, side view; *c*, one of the natatories, second pair; *d*, *ibid.*, of third pair.—p. 1220.

Fig. 2 *a*. *CORYCÆUS REMIGER*, enlarged; *b*, posterior antenna.—p. 1221.

Fig. 3 *a*. *CORYCÆUS LATUS*, enlarged; *a'*, anterior antenna; *b*, posterior, *ibid.*; *c*, leg of first pair; *d*, natatory of second pair; *e*, abdomen, side view.—p. 1221.

Fig. 4 *a*, *a'*. *CORYCÆUS VENUSTUS*, enlarged; *b*, posterior antenna; *c*, mandible or inner maxilla; *d*, leg of first pair.—p. 1222.

Fig. 5 *a*, *b*. *CORYCÆUS INQUIETUS*, enlarged.—p. 1223.

Fig. 6 *a*. *CORYCÆUS PELLUCIDUS*, enlarged; *b*, abdomen, dorsal view, and extremity of cephalothorax; *c*, cephalothorax, in profile, showing the carinate ventral process; *d*, posterior antenna.—p. 1224.

Fig. 7 *a*. *CORYCÆUS CONCINNUS*, enlarged; *b*, posterior antenna.—p. 1225.

Fig. 8 *a*. *CORYCÆUS PRODUCTUS*, enlarged; *b*, natatory of third or fourth pair.—p. 1226.

Fig. 9 *a*, *a'*. *CORYCÆUS LONGICAUDIS*, enlarged; *b*, anterior antenna; *c*, posterior, *ibid.*—p. 1226.

Fig. 10 *a*, *a'*. *ANTARIA CRASSIMANA*, enlarged; *b*, posterior antenna; *c*, leg of first pair.—p. 1228.



Fig. 11 *a*. *ANTARIA GRACILIS*, lateral view, enlarged; *b*, back view of female, with the external ovarian sacs; *c*, anterior antenna; *d*, posterior antenna.—p. 1229.

Fig. 12. *ANTARIA GRACILIS*, another variety.—p. 1229.

Fig. 13 *a*, *b*. *ANTARIA OBTUSA*; *c*, posterior antenna; *d*, *d'*, anterior feet (*d'*, with the finger closed); *e*, abdomen, of another specimen.—p. 1230.

Fig. 14 *a*. *COPILIA MIRABILIS*, enlarged; *b*, anterior part, under view, more enlarged (*a*, conspicillum or convex cornea; *b*, lens of the eye, with the pigment behind it; *c*, nerve to the antennæ); *d*, *f*, *g*, muscles.—p. 1232.

Fig. 15 *a*. *COPILIA QUADRATA*; *b*, posterior antenna; *c*, under view of mouth; *d*, natatory leg.—p. 1233.

## P L A T E 87.

Fig. 1 *a*. *SAPPHIRINA IRIS*, female, enlarged; *a'*, one of the anterior antennæ; *b*, posterior antenna; *c*, anterior feet or maxillipeds.—p. 1239.

Fig. 2 *a*. *S. IRIS*, male, enlarged; *a'*, anterior antennæ; *b*, posterior antenna; *c*, anterior feet; *d*, seminal glands and ducts.—p. 1239.

Fig. 3 *a*. *SAPPHIRINA ANGUSTA*, enlarged; *b*, posterior antenna.—p. 1240.

Fig. 4 *a*. *SAPPHIRINA ELONGATA*, enlarged; *b*, posterior antenna.—p. 1241.

Fig. 5 *a*. *SAPPHIRINA METALLINA*, enlarged; *b*, under view of anterior part; *c*, caudal lamella.—p. 1242.

Fig. 6 *a*. *SAPPHIRINA CORUSCANS*, male, enlarged; *b*, posterior antenna.—p. 1243.

Fig. 7 *a*. *SAPPHIRINA INÆQUALIS*, enlarged; *b*, posterior antenna.—p. 1244.

Fig. 8 *a*. *SAPPHIRINA OVATA*, enlarged; *b*, posterior antenna.—p. 1245.

Fig. 9 *a*. *SAPPHIRINA SPLENDENS*, enlarged; *b*, posterior antenna (unfinished sketch); *c*, caudal lamella.—p. 1246.

Fig. 10 *a*. *SAPPHIRINA OVALIS*, enlarged; *b*, posterior antenna.—p. 1246.

Fig. 11 *a*. *SAPPHIRINA DETONSA*, enlarged; *b*, under view of anterior segment, showing how far the shell is reflexed below; *c*, posterior antenna.—p. 1247.

Fig. 12 *a*. *SAPPHIRINA INDIGOTICA*, enlarged; *b*, posterior antenna.—p. 1248.

Fig. 13 *a*. *SAPPHIRINA ORIENTALIS*, male (not female, as stated on p. 1250), enlarged; *b*, part of posterior antenna; *c*, caudal lamella.—p. 1249.

Fig. 14 *a*. *SAPPHIRINA ORIENTALIS*, female, enlarged; *a'*, posterior antenna; *b*, anterior antenna; *c*, under view of anterior part of animal.—p. 1249.

Fig. 15 *a*. *SAPPHIRINA OVATO-LANCEOLATA*, female, enlarged; *b*, posterior antenna; *c*, anterior foot or maxilliped.—p. 1251.

Fig. 16 *a*. *SAPPHIRINA OVATO-LANCEOLATA*, male, enlarged; *b*, under view of head.—p. 1251.

## P L A T E 88.

Fig. 1 *a*. *SAPPHIRINA GEMMA*, female, enlarged; *a'*, anterior antennæ; *b*, *b'*, posterior antennæ, different views; *c*, anterior feet; *d*, *e*, maxillæ; *f*, maxillæ in place.—p. 1252.

Fig. 2 *a*. *SAPPHIRINA GEMMA*, male, enlarged (nervous system coloured reddish; *d*, *e*, digestive system and œsophagus, greenish; *f*, genital system, bluish; *a*, lenses of eyes; *f*, lenticular cornea or conspicilla); *a'*, lenses of the eyes and pigments, with intermediate minute eyes; *b*, anterior antenna; *c*, posterior, *ibid.*; *d*, leg of first pair; *e*, same, in position; *f*, lower extremity of genital system (same as *d* in 2 *a*); *g*, nervous ganglion and its nerves.—p. 1252.

Fig. 3 *a*. *SAPPHIRINA BELLA*, male, enlarged; *b*, eye-lenses, with the intermediate eyes; *c*, posterior antennæ; *d*, caudal lamellæ and part of abdomen bearing it.—p. 1254.

Fig. 4 *a*. *SAPPHIRINA OPALINA*, male, enlarged; *b*, third pair of natatories; *c*, fourth, *ibid.*; *d*, anterior part of body, showing lenticular corneæ on the front, two pairs of antennæ, *a'*, *a''*, and the mouth covered by the first pair of legs; *e*, mouth, with one of the legs removed; *f*, same, both legs removed; *g*, same, one of outer maxillæ removed; *h*, same, both of outer and one of inner maxillæ removed; *i*, one of inner maxillæ and mandible; *k*, *l*, outer maxillæ, in different positions.—p. 1254.

Fig. 5 *a*. *SAPPHIRINA VERSICOLOR*, male, enlarged; *b*, posterior antenna; *c*, eye-lenses and pigments, and intermediate eye-spot.—p. 1255.

Fig. 6 *a*. *SAPPHIRINA TENELLA*, male, enlarged; *a'*, view showing outline of stomach; *b*, posterior antenna; *c*, leg of first pair.—p. 1256.

Fig. 7 *a*. *SAPPHIRINA TENELLA*, female, enlarged; *a'*, anterior antennæ; *b*, posterior, *ibid.*; *c*, leg of first pair.—p. 1256.

Fig. 8 *a*, *b*. *SAPPHIRINA* ———?—p. 1258.

Fig. 9. *SAPPHIRINA OBESA*, enlarged.—p. 1258.

Fig. 10. *SAPPHIRINA OBTUSA*, enlarged.—p. 1259.

Fig. 11. *MIRACIA EFFERATA*, female, enlarged.—p. 1260.

Fig. 12 *a*. *MIRACIA GRACILIS*, enlarged; *b*, appendage to beak; *c*, another variety.—p. 1261.

## P L A T E 89.

Fig. 1 *a*, *b*. *DAPHNELLA ANGUSTA*, enlarged; *c*, anterior antennæ; *d*, leg of first pair; *e*, *ibid.*, of fourth pair, magnified three-fourths more than 1 *a*; *f*, dorsal abdominal appendage.—p. 1268.

Fig. 2 *a*, *b*. *PENILIA AVIROSTRIS*, enlarged.—p. 1269.

Fig. 3 *a*, *b*, *c*. *PENILIA ORIENTALIS*, enlarged; *d*, antenna; *e*, natatory leg.—p. 1270.

Fig. 4 *a*. *DAPHNIA AUSTRALIENSIS*, female, enlarged; *b*, male, in profile; *c*, vertical view of head; *d*, abdomen, in part, with stomach and intestine; *e*, enlarged view, showing areolation of shell.—p. 1271.

Fig. 5 *a*. *DAPHNIA MACRURA*, enlarged; *b*, upper view of outline of head.—p. 1272.

Fig. 6 *a*, *b*. *CERIODAPHNIA TEXTILIS*, enlarged.—p. 1274.

Fig. 7 *a*, *b*. *LYNCEUS LATIFRONS*, enlarged.—p. 1274.

Fig. 8 *a*. *PLEOPIS BREVICAUDIS*; *b*, leg of second pair; *c*, *ibid.*, of fourth pair.—p. 1276.

Fig. 9 *a*. *CYTHERA AMERICANA*, view of female, after removal of one valve of shell, showing two pairs of antennæ, one of mandibles, one of maxillæ, and three pairs of legs, with abdomen and its appendages; *b*, animal, covered by its shell; *c*, part of shell, more enlarged; *d*, dorsal view, showing outline; *e*, outline of shell, with abdomen of male and one leg; *f*, same, with abdomen thrown out, as often observed, after putting the animal in hot water; *g*, *h*, male abdomen, with its two folds or portions separated; *i*, another view of same; *k*, bases of legs, showing bony framework, for their articulation; *l*, abdominal appendage of female (same as *c*, in figure 9 *a*).—p. 1283.

## P L A T E 90.

Figs. 1, 2, 3, 4, 5, *a* to *g*, organs in the order, first antenna, second antenna, mandible, maxilla, maxilliped, legs of two pairs, of 1. *CYPRIS CHILENSIS*; 2. *CYTHERE AMERICANA*; 3. *CYPRIDINA*; 4. *CONCHÆCIA*; 5. *HALOCYPRIS INFLATA*.

Fig. 6. *CYPRIS SPECIOSA*, enlarged.—p. 1285.

Fig. 7 *a*. *CYPRIS CHILENSIS*, side view, enlarged; *b*, upper view of shell; *c*, side view of animal, shell removed.—p. 1285.

Fig. 8 *a*. *CYPRIS PUBESCENS*, side view, enlarged; *b*, upper view; *c*, anterior antenna; *d*, posterior antenna; *e*, leg of first pair.—p. 1287.

Fig. 9 *a*. *CANDONA? VITIENSIS*, side view, enlarged; *b*, vertical view; *c*, anterior antenna; *d*, posterior antenna.—p. 1288.

Fig. 10. *CANDONA? ALBIDA*, side view, enlarged.—p. 1289.

## P L A T E 91.

Fig. 1 *a*. *CYPRIDINA LUTEOLA*, enlarged; *b*, dorsal view, outline; *c*, animal, removed from the shell (showing, *d*, eye; *e*, anterior antennæ; *f*, posterior, *ibid.*; *g*, mandibular feet; *h*, buccal mass, with its processes; *i*, maxilla of first pair; *k*, *ibid.*, of second pair; *l*, *ibid.*, of third pair; *m*, ovarian feet; *n*, caudal extremity); *d*, part of eye; *d'*, one of the lenses; *e*, anterior antenna; *f*, part of a plume of posterior antennæ; *g*, part of mandibular foot, with mandibular process at *g'*; *g''*, same process, in profile; *h*, buccal mass and organs, under view (*g*, mandibular feet; *i*, maxilla of first pair; *k*, *ibid.*, of second pair; *l*, *ibid.*, of third pair; *r*, *t*, processes on the anterior and posterior part of the buccal mass; *s*, fleshy prominence intermediate, (see figure 1 *c*)); *i*, maxilla of first pair, same with *i*, in figures 1 *c* and 1 *h*; *i'*, same, reversed; *k*, maxilla of second pair, same as *k*, in figures 1 *c* and 1 *h*; *l*, maxilla of third pair, same as *l*, in figures 1 *c* and 1 *h*; *m*, extremity of ovarian feet; *n*, larger of caudal spines.—p. 1291.

Fig. 2 *a*, *b*. *CYPRIDINA PUNCTATA*, enlarged.—p. 1293.

Fig. 3 *a*, *b*. *CYPRIDINA OLIVACEA*, enlarged; *a'*, natural size.—p. 1294.

Fig. 4 *a*. *CYPRIDINA GIBBOSA*, enlarged; *b*, anterior antenna; *c*, posterior antenna; *d*, mandibular feet; *e*, abdomen.—p. 1295.

Fig. 5 *a*. *CYPRIDINA FORMOSA*, enlarged; *b*, upper view, in outline; *c*, lateral view of animal; *d*, antenna of first pair; *e*, antenna of second pair; *f*, mandibular foot; *g*, ciliated plate, from maxilla of second pair; *h*, maxilla of third pair.—p. 1296.

Fig. 6 *a*. *CONCHÆCIA AGILIS*, under view, enlarged; *b*, lateral view; *c*, under view, with opened shell; *d*, anterior antennæ and intermediate spiculum; *e*, mandibular feet.—p. 1299.

Fig. 7 *a*. *CONCHÆCIA ROSTRATA*, posterior antenna, enlarged; *b*, mandibular feet; *c*, maxilla of first pair; *d*, maxilla of second pair; *e*, leg of first pair; *f*, leg of second pair.—p. 1300.

Fig. 8 *a*. *HALOCYPRIS INFLATA*, dorsal view, enlarged; *b*, lateral *ibid.*; *c*, under view, valves open (*d*, inner antennæ, with spiculum between them; *e*, antennæ of second pair; *f*, mandibular feet; *g*, maxillæ; *h*, maxillæ, second pair; *i*, *k*, feet of two pairs; *m*, muscle); *d*, anterior antenna and spiculum; *e*, posterior antenna; *f*, mandibular feet; *g*, *h*, maxillæ; *i*, *k*, legs of two pairs.—p. 1301.

Fig. 9 *a*. *HALOCYPRIS BREVIROSTRIS*, dorsal view; *b*, lateral view; *c*, part of second pair of antennæ.—p. 1303.

## P L A T E 92.

Figs. 1 *a* to *k*, dissections of *SAPPHIRINA*; 2 *b* to *k*, of *ARGULUS*;

3 *a* to *k*, of *CALIGUS*; 4 *a* to *k*, of *PANDARUS*; 5 *a* to *k*, of *LEPIDOPUS*; 6 *a* to *i*, of *DICHELESTION*; 7 to 7 *h*, of *LERNENTOMA*.—*a*, antenna of first pair; *b*, *ibid.*, of second pair; *c*, mandible; *d*, maxilla; *e*, maxilliped, or leg homologous with it; *f*, *g*, *h*, *i*, *k*, pairs of legs, in succession, or parts homologous.

## P L A T E 93.

*CALIGUS AMERICANUS*, p. 1317.—*a*, under view of male, enlarged; *a'*, male, natural size; *a''*, female, natural size; *b*, female antenna of second pair; *c*, female prehensile leg; *d*, maxilla; *e*, extremity of maxilliped; *f*, *f'*, part of flexor muscles of posterior part of body (p. 1326); *g*, *g'*, valves in the circulation (p. 1341); *h*, dorsal view, showing muscles (p. 1325); *i*, areas in shell, over the eyes; *k*, digestive system (p. 1337); *l*, oesophagus, showing glands of surface; *m*, part of intestine; *n*, *o*, glands, near mouth; *p*, *p'*, *p''*, *p'''*, different views of parts of mouth (p. 1320); *q*, under view of female, showing nervous and genital system; *r*, nerves to antenna; *s*, nervous ganglion; *t*, male genital system; *u*, *u'*, condition of front, during moulting; *v*, flexed muscle of figure *u*, seen in profile; *w*, abdomen of female, with a corneous appendage to vulva, terminating in a bulb (probably torn from male, in coition?) [In text, p. 1321, 19th line from top, "between *p* and *p'*," should read, between *q* and *q'*.]

## P L A T E 94.

Fig. 1 *a*. *MONSTRILLA VIRIDIS*, animal, enlarged; *b*, profile, showing sucker mouth; 1 *c*, mouth prominence, enlarged; *d*, abdomen, in profile, with last segment of cephalothorax and natatory feet.—p. 1313.

Fig. 2 *a*, *b*. *ARGULUS PUGETTENSIS*, enlarged.—p. 1351.

Fig. 3 *a*. *CALIGUS THYMNI*, male, enlarged; *b*, posterior antenna of female; *c*, abdomen, *ibid.*—p. 1353.

Fig. 4. *CALIGUS PRODUCTUS*, enlarged.—p. 1354.

Fig. 5 *a*. *CALIGUS GRACILIS*, enlarged; *b*, posterior antenna of female; *c*, maxilla; *d*, leg of second pair.—p. 1356.

Fig. 6 *a*. *LEPEOPHTHEIRUS BAGRI*, female, enlarged; *b*, posterior antennæ of female; *c*, maxillæ, *ibid.*; *d*, first pair of feet, *ibid.*; *e*, leg of second pair, *ibid.*; *f*, posterior antenna of male; *g*, leg of second pair, *ibid.*; *h*, abdomen, *ibid.*—p. 1357.

Fig. 7 *a*. *CALISTES TRIGONIS*, female, enlarged; *b*, posterior antenna, with the exterior spine, *b'*; *c*, aculeate part of maxilla, showing its forked character; *d*, leg of first pair; *e*, *ibid.*, of second pair.—p. 1359.

Fig. 8 *a*. *CALIGERIA BELLA*, female, enlarged; *b*, *c*, *d*, *e*, the posterior antenna, maxilla, and first and second feet, in relative position; *f*, furcula; *g*, leg of last pair; *h*, under view of abdomen, showing appendages, sometimes observed attached.—p. 1360.

Fig. 9 *a*. *NOGAGUS VALIDUS*, enlarged; *b* to *g*, organs, in their relative positions, first and second antennæ, mouth, first, second, and third pairs of feet; *h*, third and fourth pairs of natatories.—p. 1363.

## P L A T E 95.

Fig. 1 *a*. *PANDARUS CONCINNUS*, enlarged; *b*, anterior antenna; *c*, caudal stylet.—p. 1366.

Fig. 2 *a*. *PANDARUS SATYRUS*, enlarged; *b*, ventral view, more enlarged; *c*, caudal extremity, with commencement of external tube of eggs.—p. 1367.

Fig. 3 *a*. *PANDARUS BREVICAUDIS*, enlarged; *b* to *g*, organs, in their natural positions; *h*, last two pairs of natatories.—p. 1368.

Fig. 4 *a*. *DINEMATURA BRACCATA*, enlarged; *b*, ventral view.—p. 1370.

Fig. 5 *a*. *LEPIDOPUS ARMATUS*, enlarged; *a'*, ventral view; *b*, buccal trunk, with maxilla either side; *c*, extremity of same; *d*, separate view of maxilla; *e*, posterior antenna; *f*, maxilliped or foot of first pair; *g*, prehensile feet; *h*, *i*, natatory of first and second pairs; *k*, one of two posterior pairs of natatories.—p. 1373.

Fig. 6 *a*. *SPECILLIGUS CURTICAUDIS*, enlarged; *b*, eyes; *c*, under view, showing organs, in order; *d*, *e*, hand of prehensile feet, in

profile; *f*, penult natatories; *g*, natatory of fourth or posterior pair; *h*, mandible and extremity of buccal trunk.—p. 1375.

Fig. 7. *CORYCÆUS DEPLUMATUS*, jun.?

Fig. 8. Young of a *SCHIZOPOD*.

Figs. 9, 10, 11. Young of ———?

## P L A T E 96.

Fig. 1 *a*, *b*. *LERNÆOPODA CALIFORNIENSIS*, enlarged.—p. 1379.

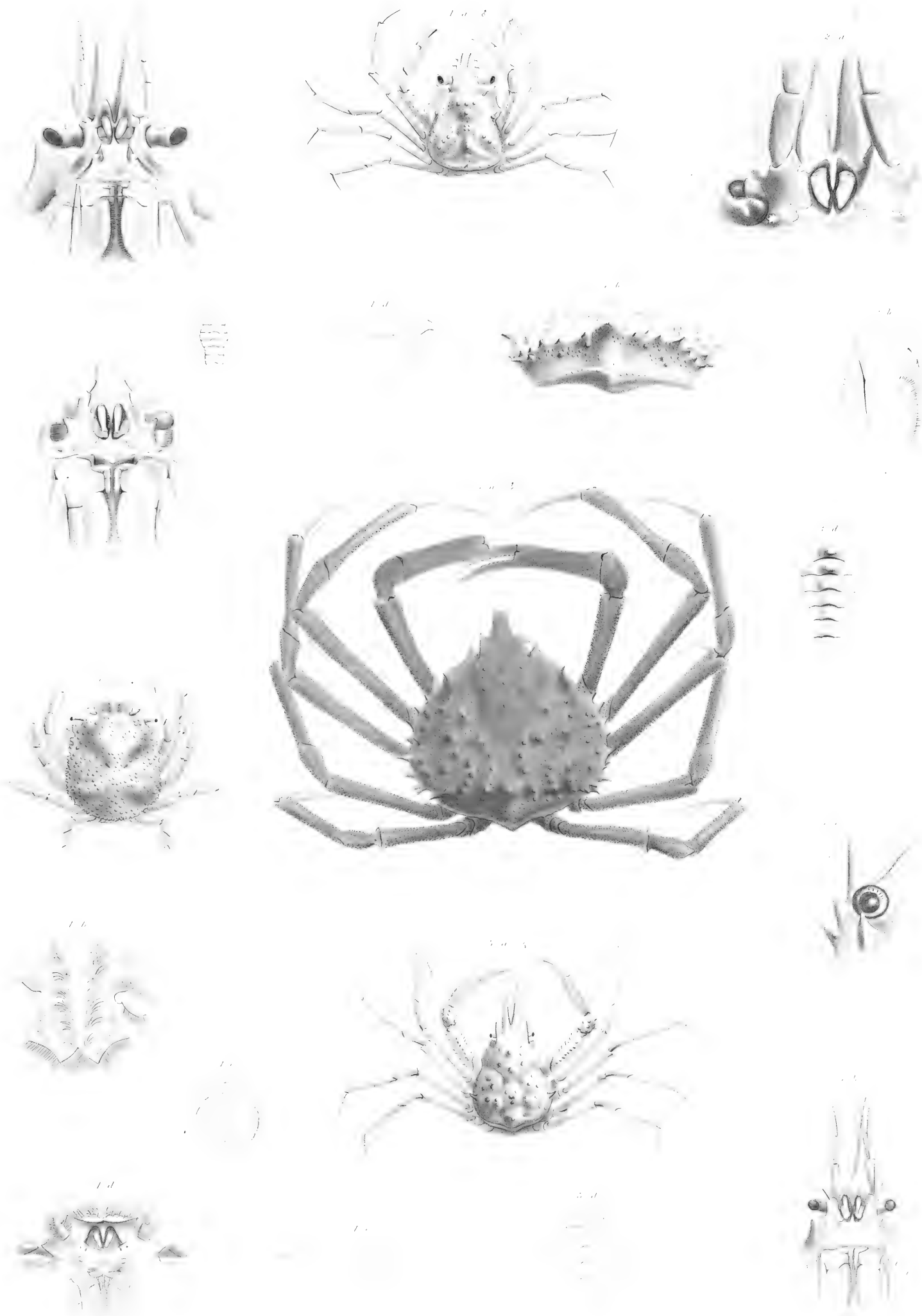
Fig. 2 *a*. *PYCNOGONUM ORIENTALE*, specimen mutilated; *b*, body, more enlarged, showing branching of alimentary tube; *c*, appendage to cephalic segment.—p. 1391.

Figs. 3 to 8. *ANATIFIDÆ*.—p. 1393.

Fig. 9 *a* to *g*. *ACASTA SPORILLUS*, of Darwin.







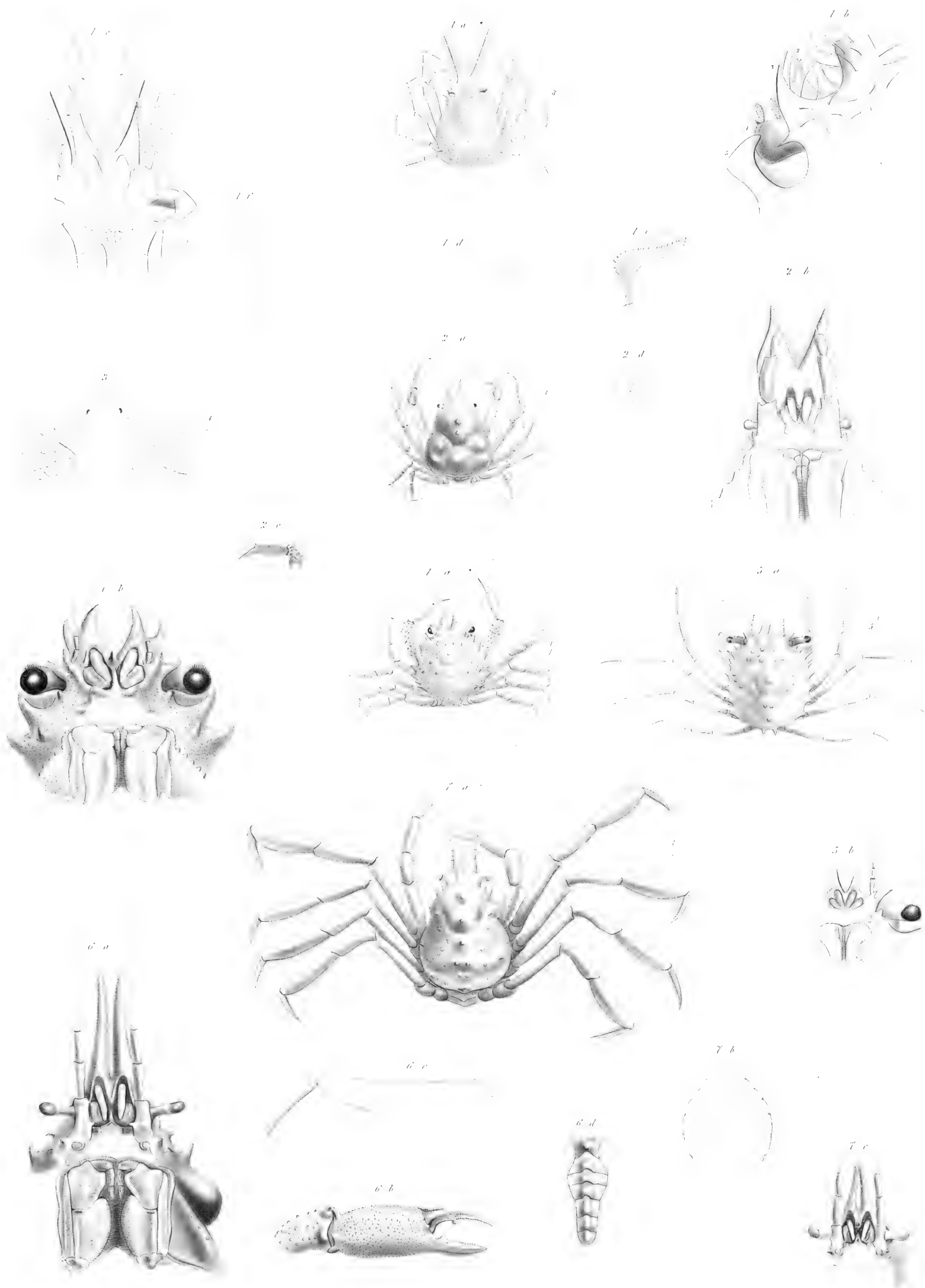
1 a, d. *Hyas lyratus*.  
2 a, b. *Pisoides Edwardsii*.

3 a, d. *Chorilia longipes*.

5 a, d. *Libinia coccinea*.  
4 a, e. *Micippa hirtipes*.





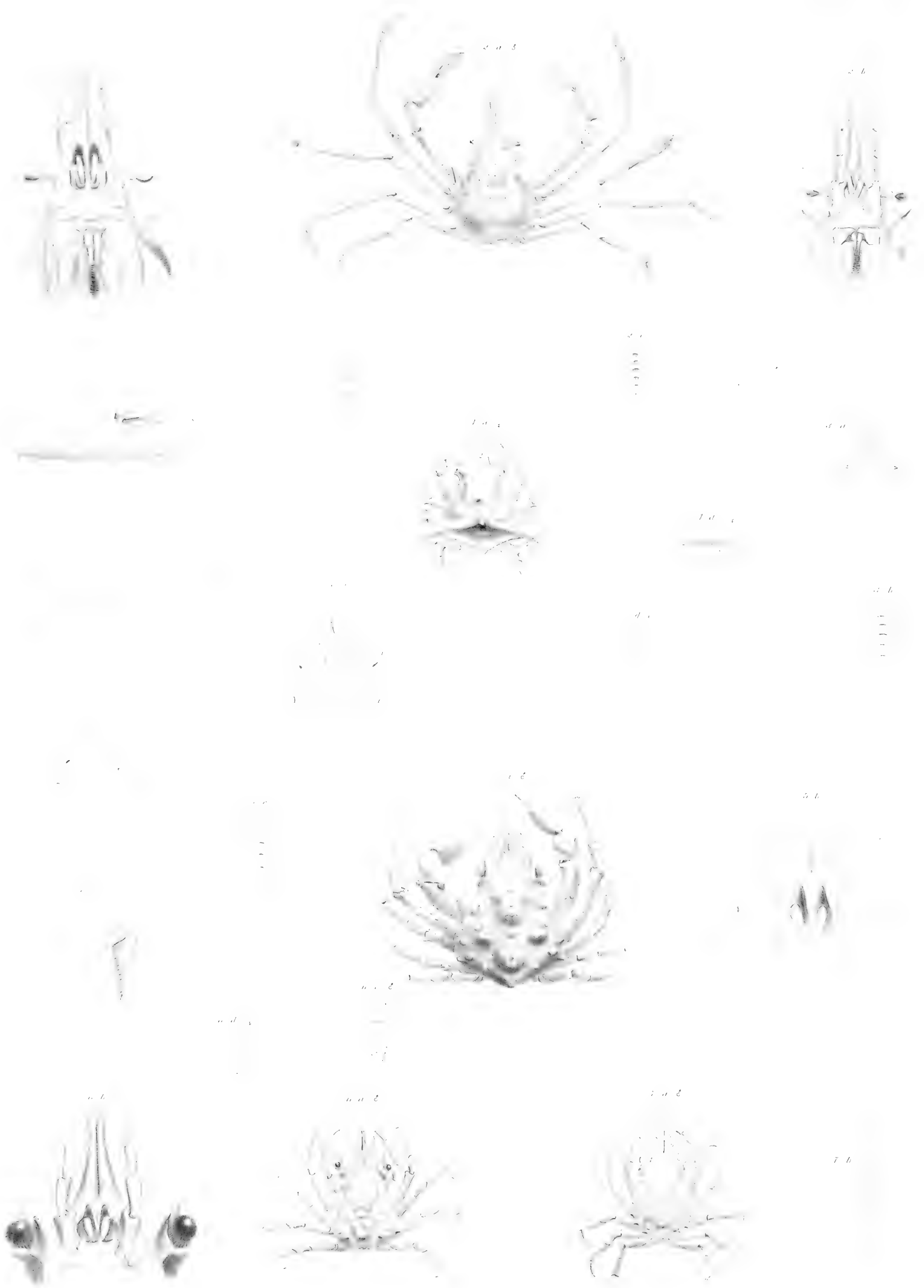


- 1 a..f..Lahaina ovata.
- 2 a..d..Seyra acutifrons.
- 3 Pyria pubescens.

- 4 a..b..Mithrax asper.
- 5 a..b..Cyclax Perryi.
- 6 a..d..Eurypodius septentrionalis

7 a..c..E. brevipes.





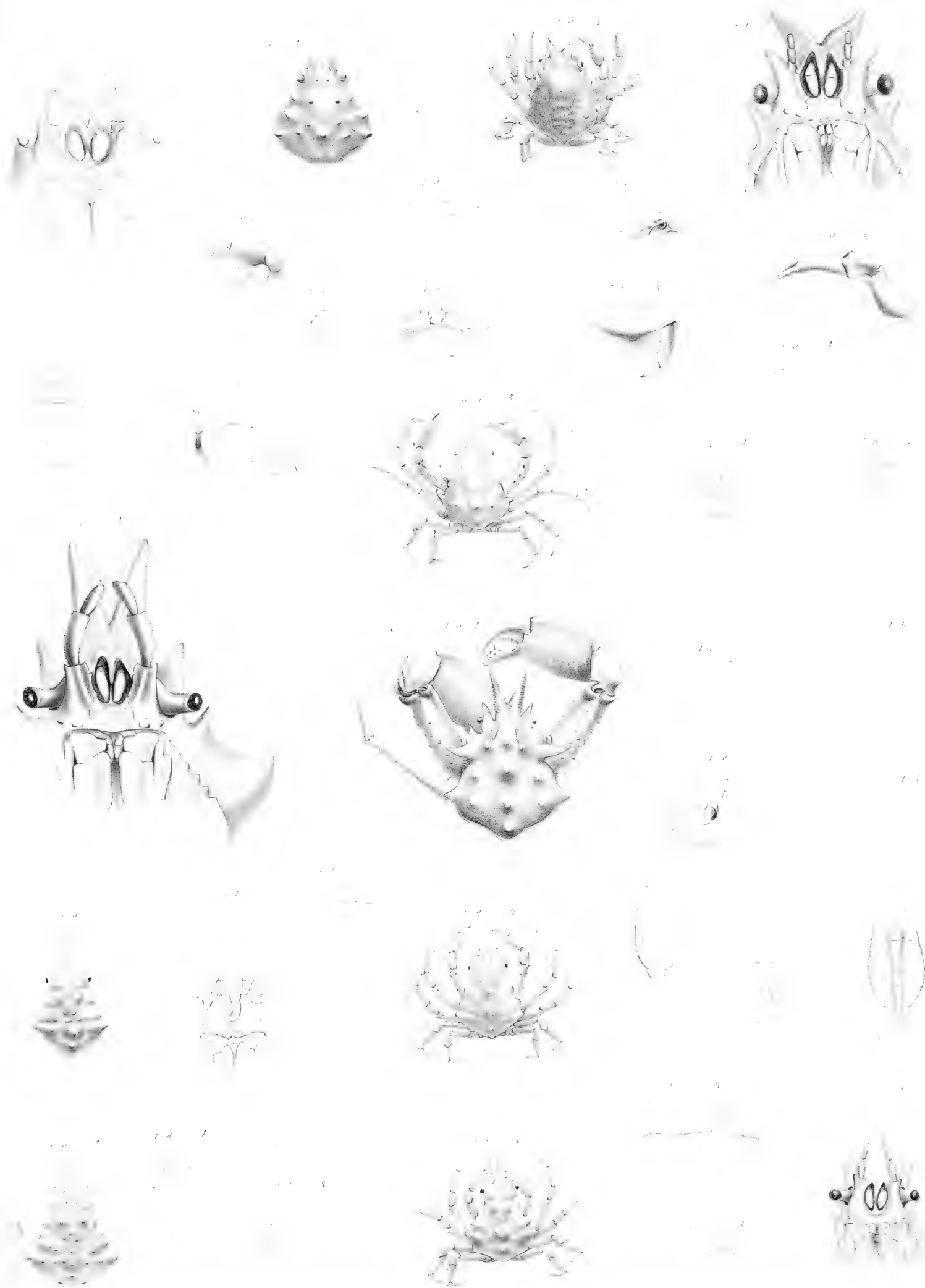
1 a, d. Eurypodius Latreillii.  
2 a, c. Oregonia gracilis.  
3 a, b. hirta.

7 a, b. Tiarinia angusta.

4 a, d. Pericera trigona.  
5 a, c. Tiarinia cornigera.  
6 a, d. gracilis.





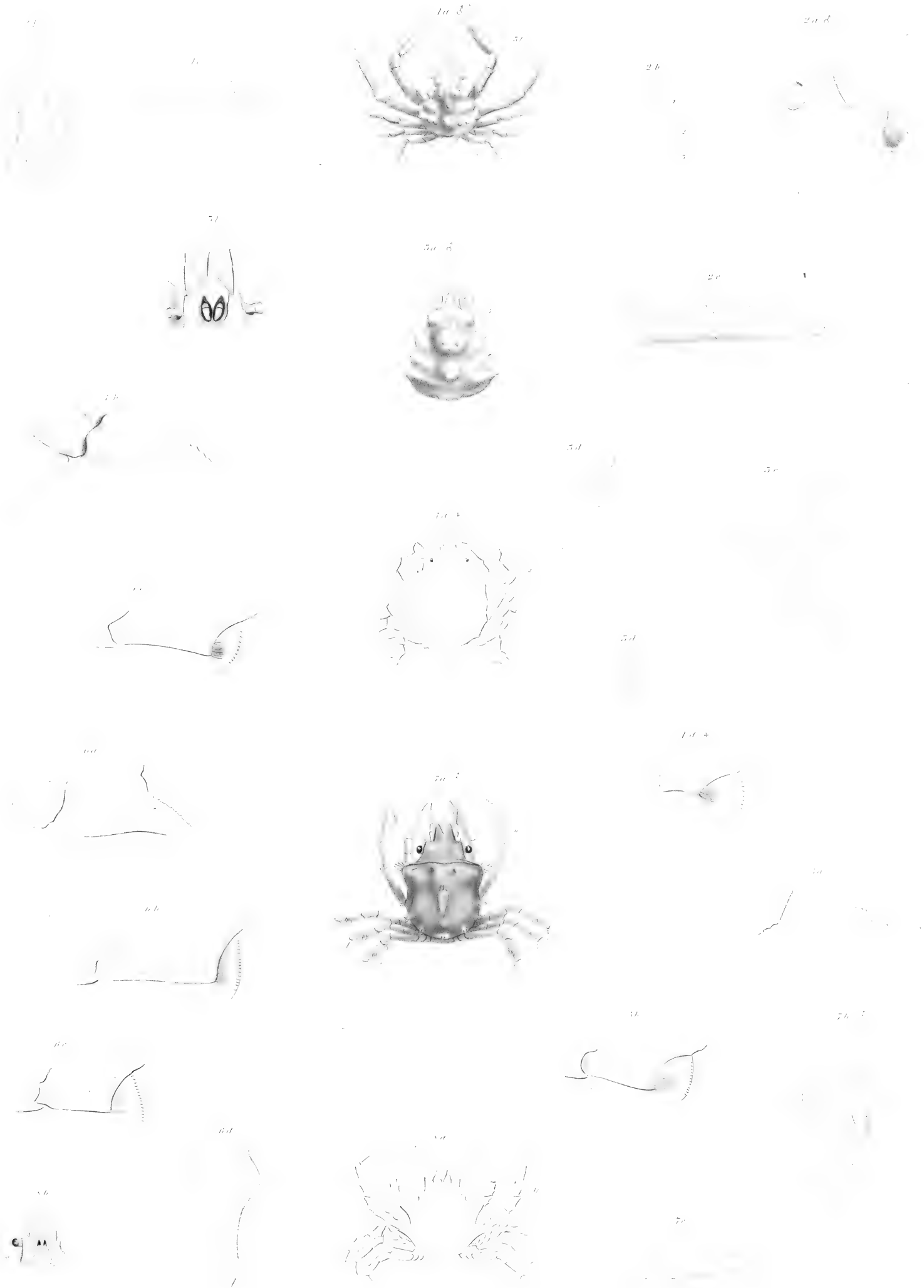


1 a, b. *Perinea tumida*  
 2 a, b. *Halimius tumidus*  
 3 a, b. *Pugettia gracilis*

7 a, b. *Menethius subserratus*

4 a, b. *Pugettia Richii*  
 5 a, b. *Menethius angustus*  
 6 a, b. *Menethius depressus*





- 1 a... c. Menæthius tuberculatus.  
2 a... c. areolatus.  
3 a... d. inornatus.  
4 a... d. Acanthonyx simplex.

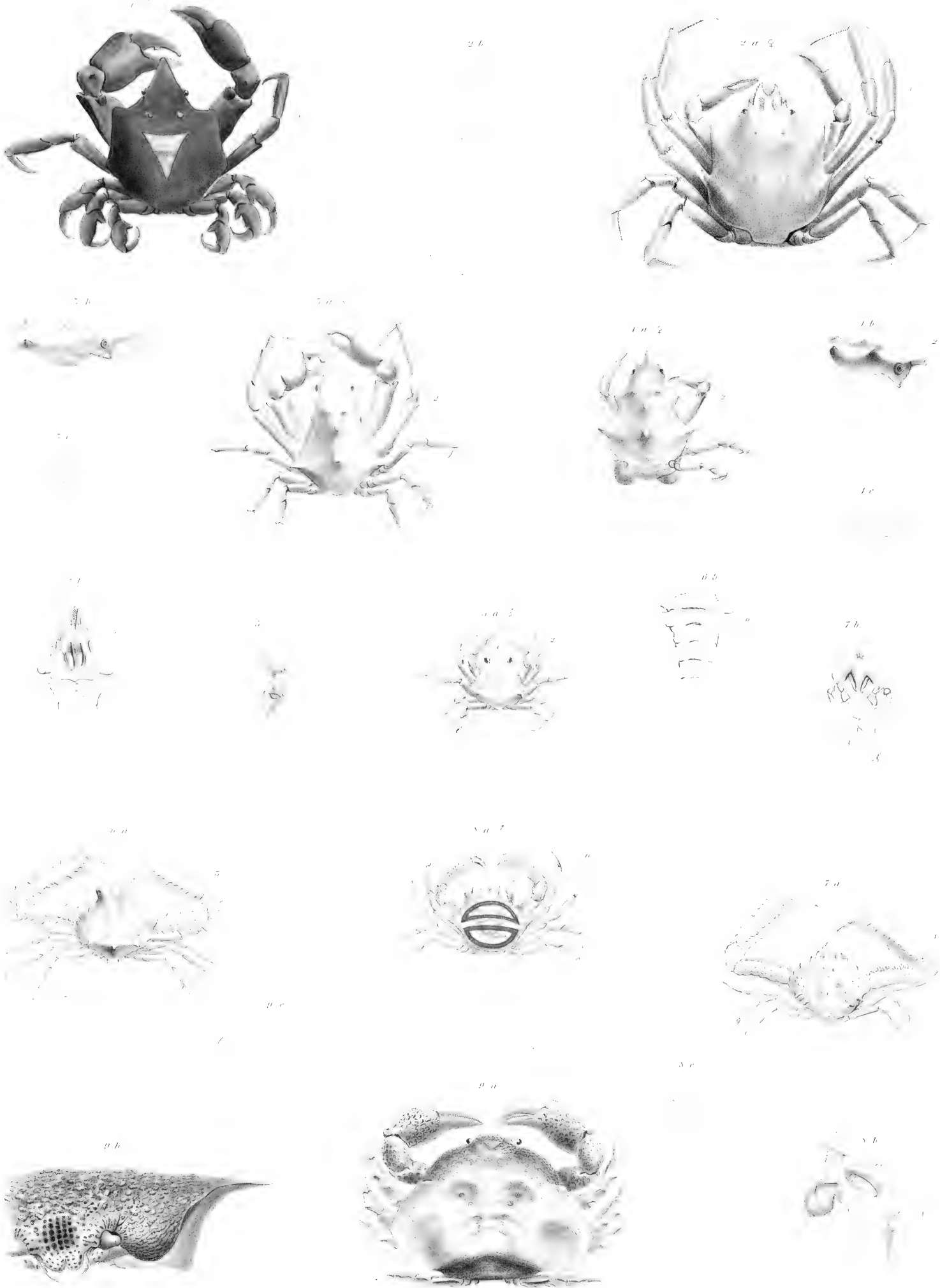
- 5 a. b. Acanthonyx debilis.  
6 a... d. Petiverii.  
7 a... c. Peltinia scutiformis.  
8 a. b. nodulosa.





U. S. Exploring Expedition.

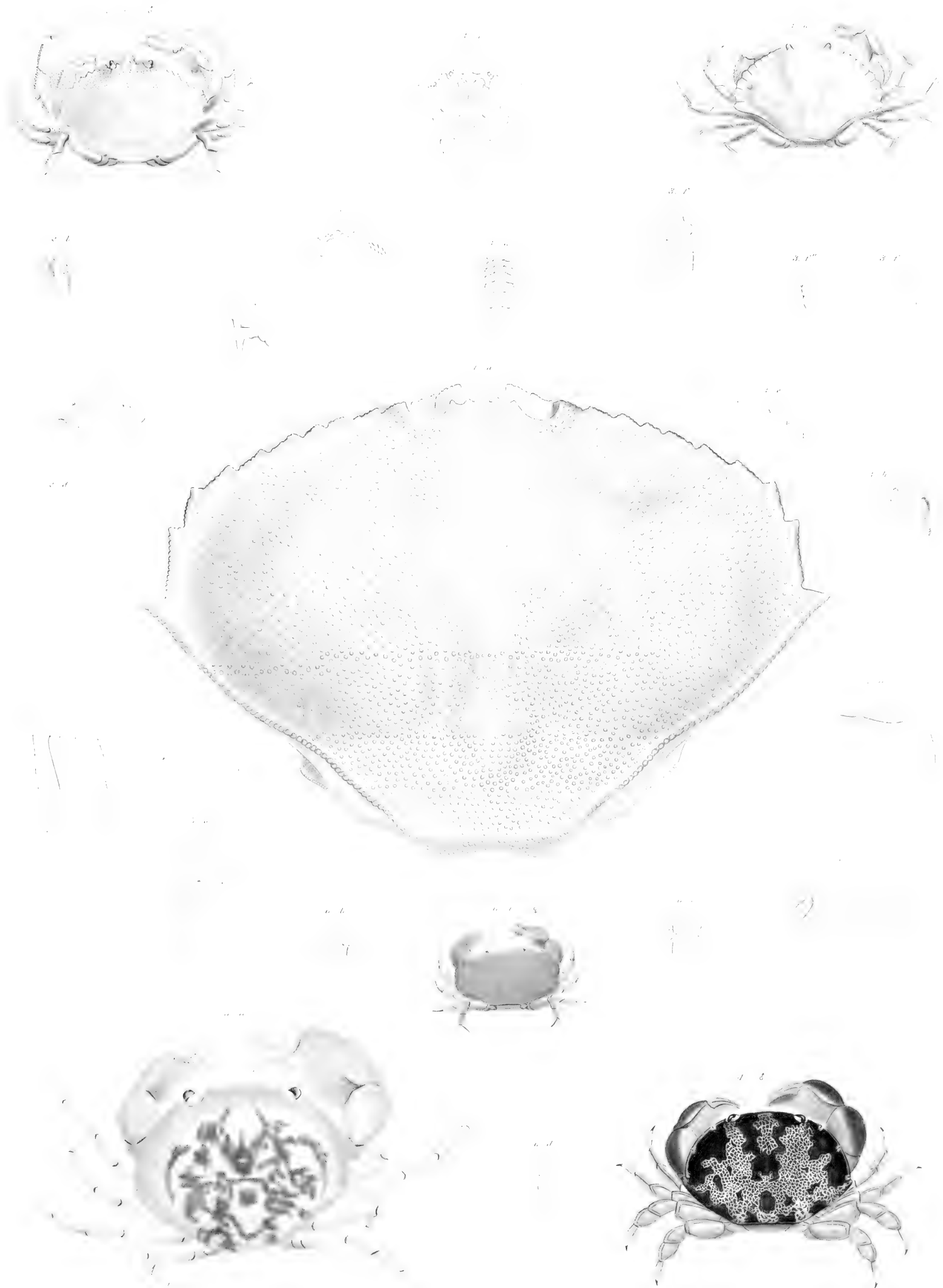
NAT. HIST. MUSEUM, PL. 5.



- |          |                 |                        |          |                       |                    |
|----------|-----------------|------------------------|----------|-----------------------|--------------------|
| 1        | <i>Epialtus</i> | <i>brasiliensis</i> .  | 5 a., c. | <i>Leucippa</i>       | <i>levis</i> .     |
| 2 a., b. |                 | <i>productus</i> .     | 6 a., b. | <i>Lambrus</i>        | <i>gracilis</i> .  |
| 3 a., c. | <i>Ilucnia</i>  | <i>simplex</i> .       | 7 a., b. |                       | <i>rhombicus</i> . |
| 4 a., c. |                 | <i>brevirostrata</i> . | 8 a., c. | <i>Ceratocarcinus</i> | <i>speciosus</i> . |
|          |                 |                        | 9 a., c. | <i>Eucynolambrus</i>  | <i>australis</i> . |

Drawn by J. D. Dana.



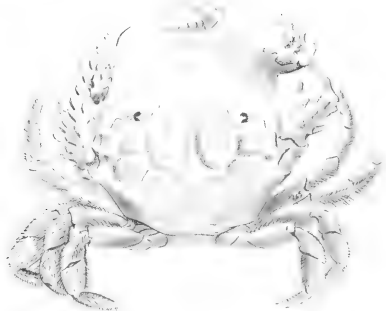
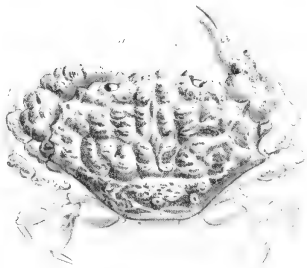
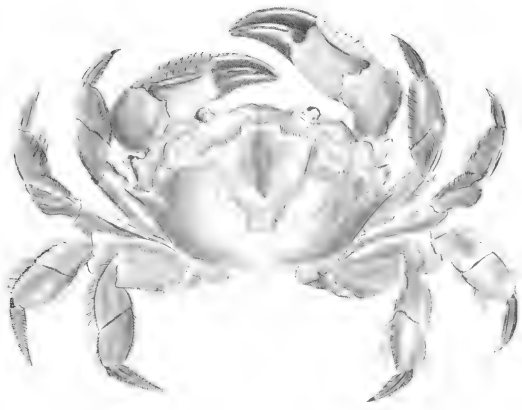
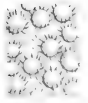
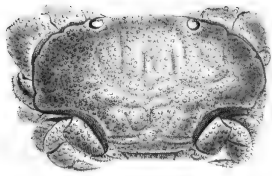
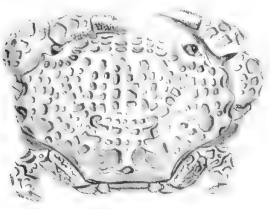


1 a. d. Cancer magister.  
2 a. d. ——— gracilis.  
3 a. h. ——— productus

4. Atergatis floridus  
5 a. h. Carpilius convexus  
6 a. d. Liomera lata





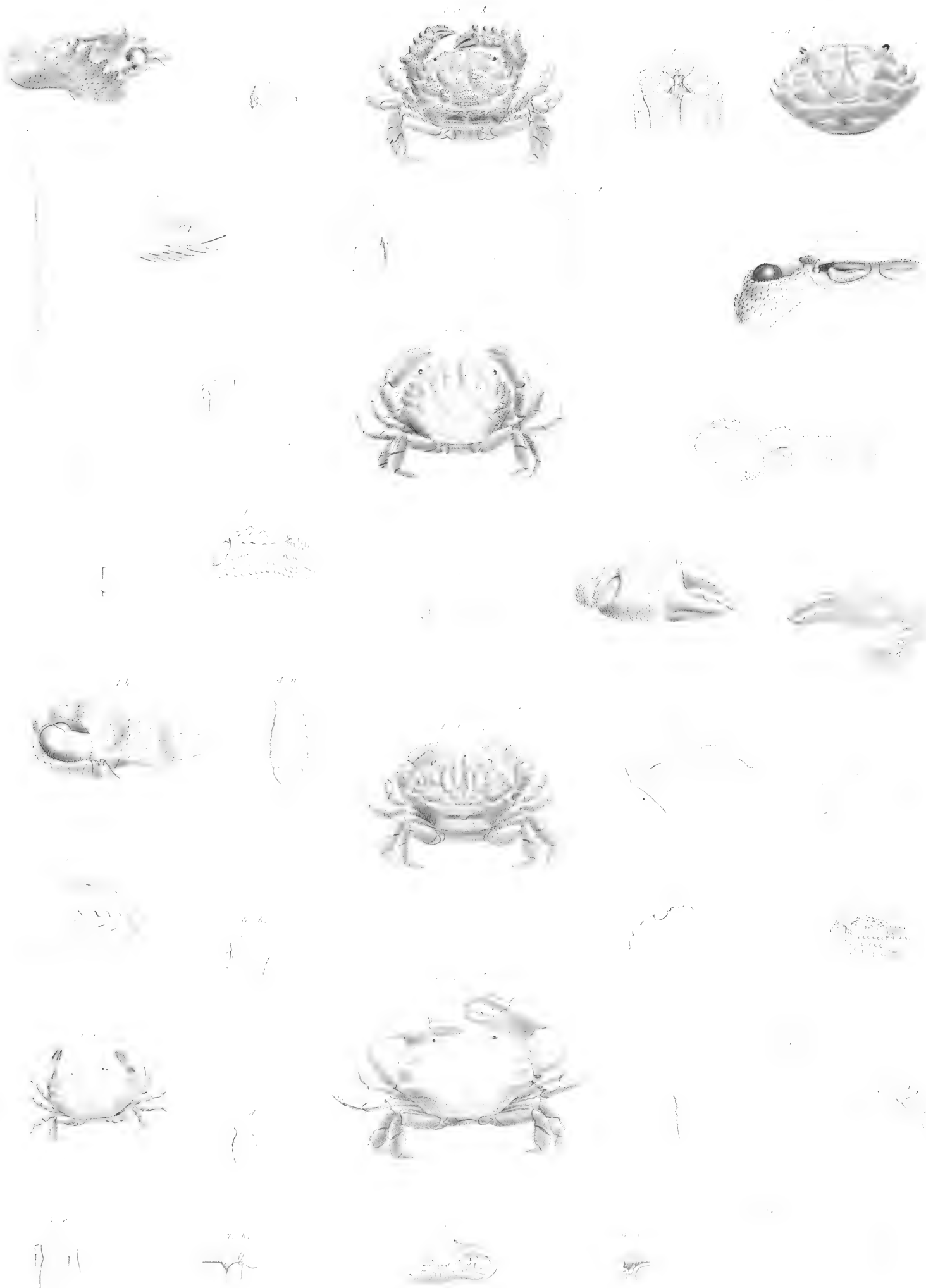


1. a. b. Aetaea areolata.  
2. cellulosa.  
3. hirsutissima.  
4. a. b. Xantho nitidus.  
5. a. b. superbus.  
6. a. d. dispar.

7. Xantho minor.  
8. a. d. Euxanthus sculptilis.  
9. a. b. nitidus.  
10. a. c. Xanthodes granoso-mansus.  
11. a. c. nitidus.  
12. a. b. notatus.

13. a. c. Panopeus brevis.





- 1 a., g. Medeus ornatus.  
 2 a., h. Eusius deflexus.  
 3 a., d. Etisodes frontalis.  
 4 a., d. calatus.

- 5 a., e. Zoëmus levis.  
 6 a., s. gemmula.  
 7 a., d. Carpilodes tristis.  
 8 a., d. Actinodes areolatus.



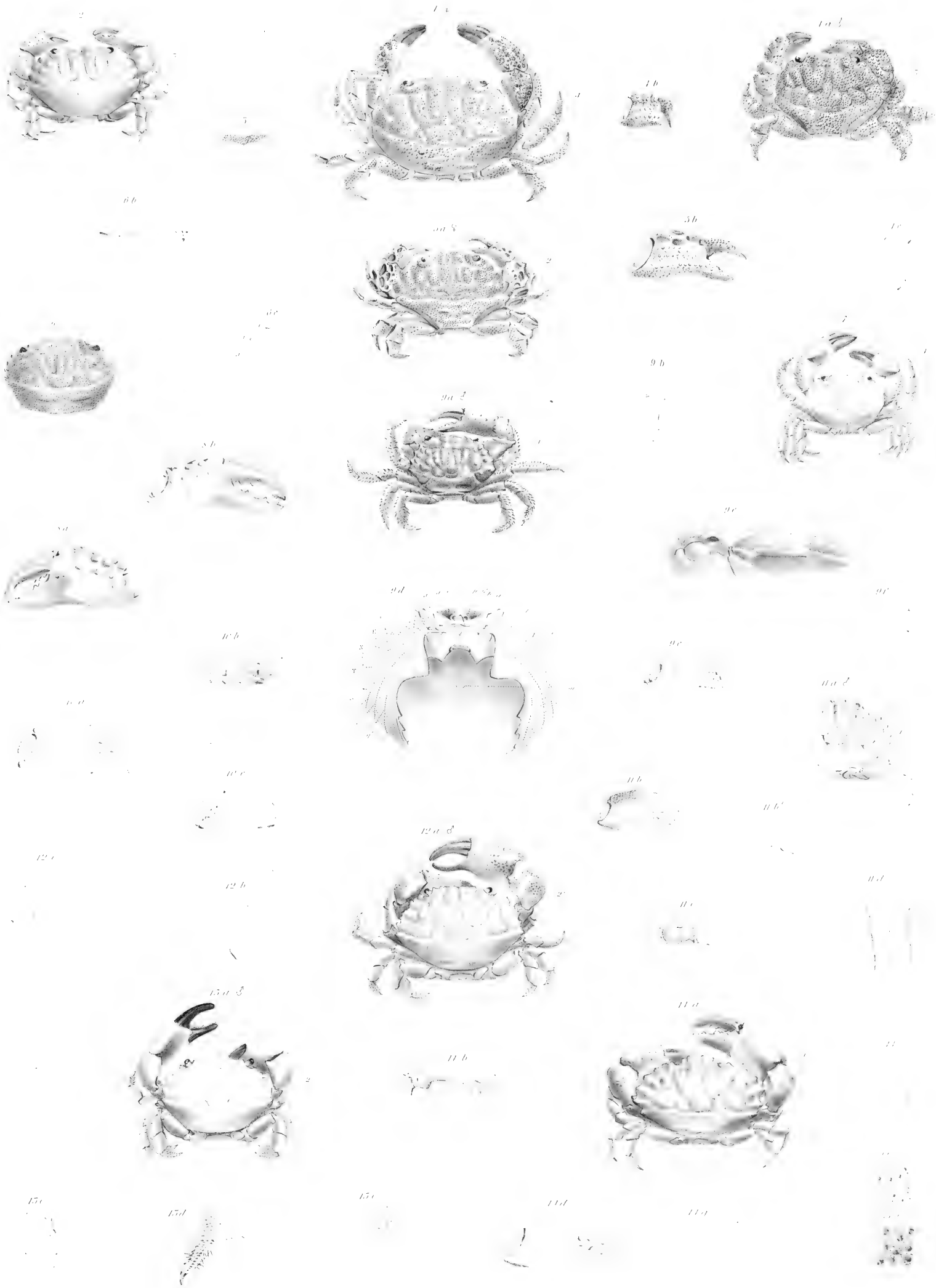




1 a. b. *Etisus levimanus*.  
2 a. b. *Etisus dentatus*.

3 *Zoexenus aeneus*  
4 a. d. *Daira variolosa*

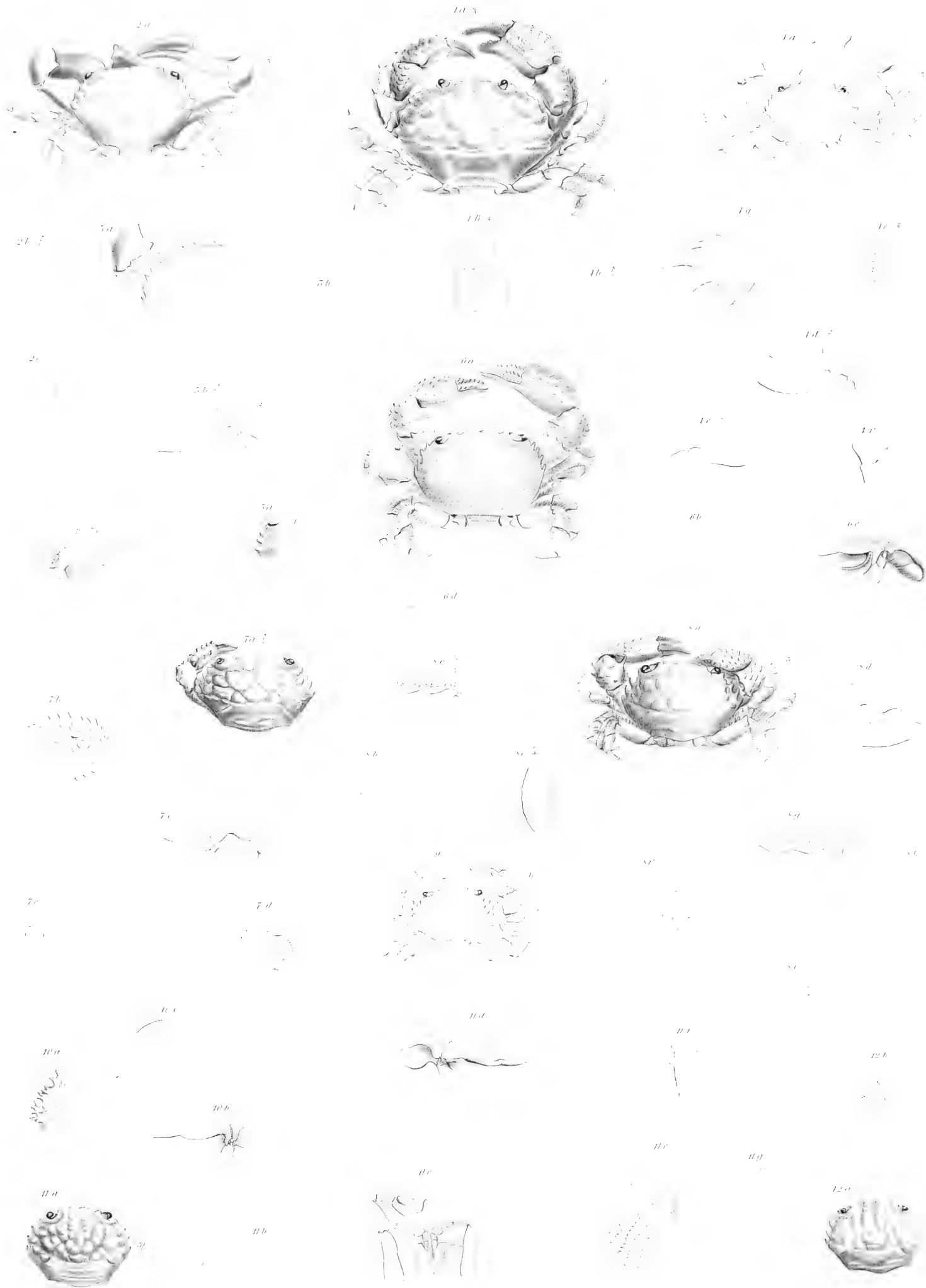




- |         |                     |          |                     |          |                          |
|---------|---------------------|----------|---------------------|----------|--------------------------|
| 1.      | Actaeodes faba.     | 5 a, b.  | Actaeodes cavipes.  | 9 a, f.  | Chlorodius monticulosus. |
| 2.      | bellus.             | 6 a, c.  | spongiosus.         | 10 a, c. | obscurus.                |
| 3.      | affinis.            | 7        | integerrimus.       | 11 a, d. | sanguineus.              |
| 4.      | speciosus.          | 8 a, b.  | angulatus.          | 12 a, c. | nudipes.                 |
| 5 a, c. | Chlorodius graells. | 15 a, c. | Chlorodius nodosus. |          |                          |







1 . b *Chlorodius cavipes*.  
 2 a . c " *cytherea*.  
 3 a . b " *nebulosus*.  
 4 a . f " *levissimus*.

5 a . c *Chlorodius niger*.  
 6 a . d *Pilodius pubescens*.  
 7 a . e " *nitidus*.  
 8 a . i " *pugil*.

9 . *Pilodius scabriculus*.  
 10 a . c " *pilumnoides*.  
 11 a . g *Cyclodius ornatus*.  
 12 a . b " *gracilis*.





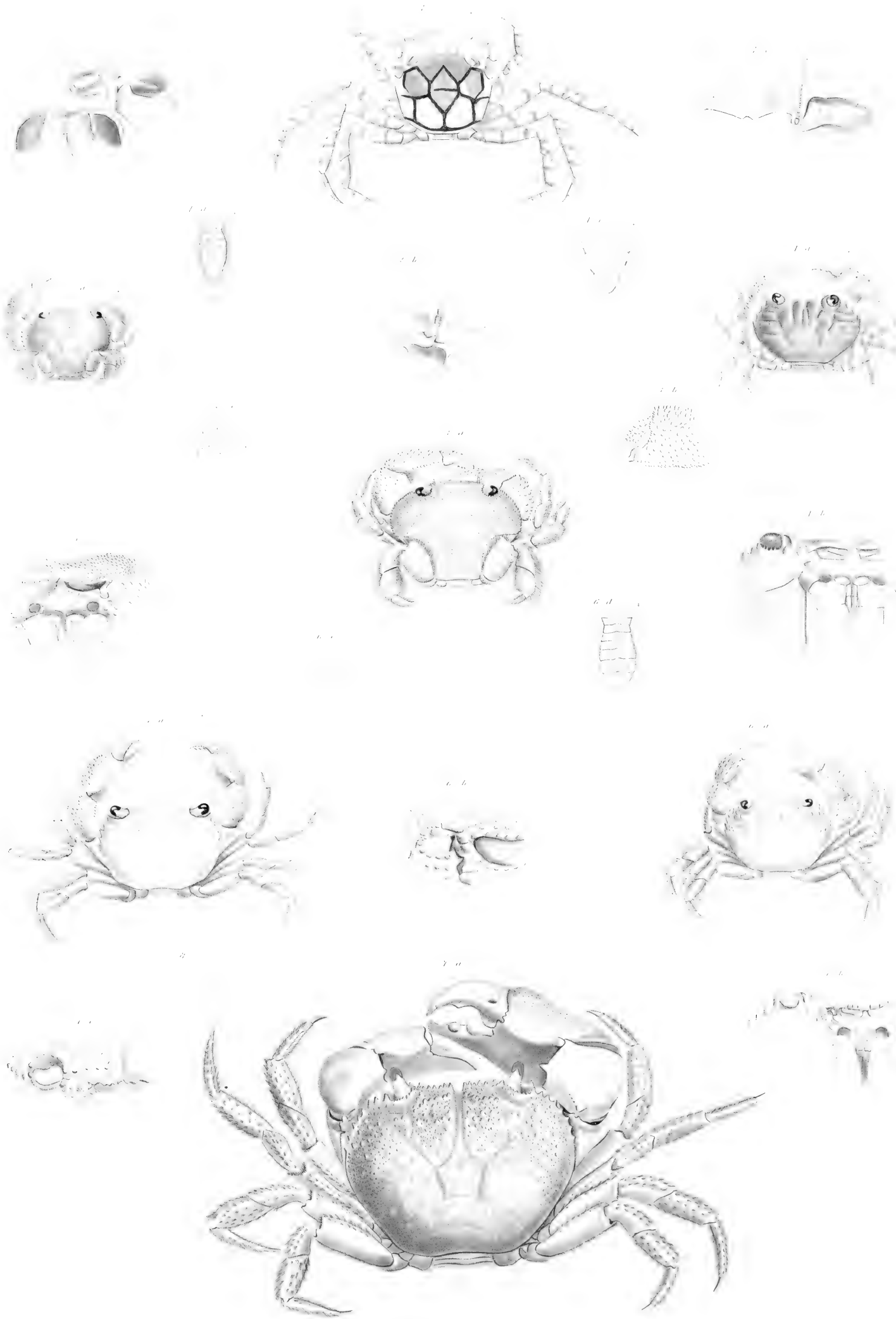
1. Cymo melanodactylus.
2. a. b. — Andreossyi.
3. a. b. c. Polydectus villosus.
4. a. b. c. Ozius truncatus.
5. a. b. Galene Hawaiensis.
6. a. b. c. Pseudozius planus.

7. a. b. c. Pseudozius inornatus.
8. a. b. c. — — — — —
9. a. b. c. — — — — —
10. a. b. c. Pseudozius globosus.
11. a. b. c. — — — — —
12. a. b. c. — — — — —

13. a. b. c. Pseudozius tenellus.



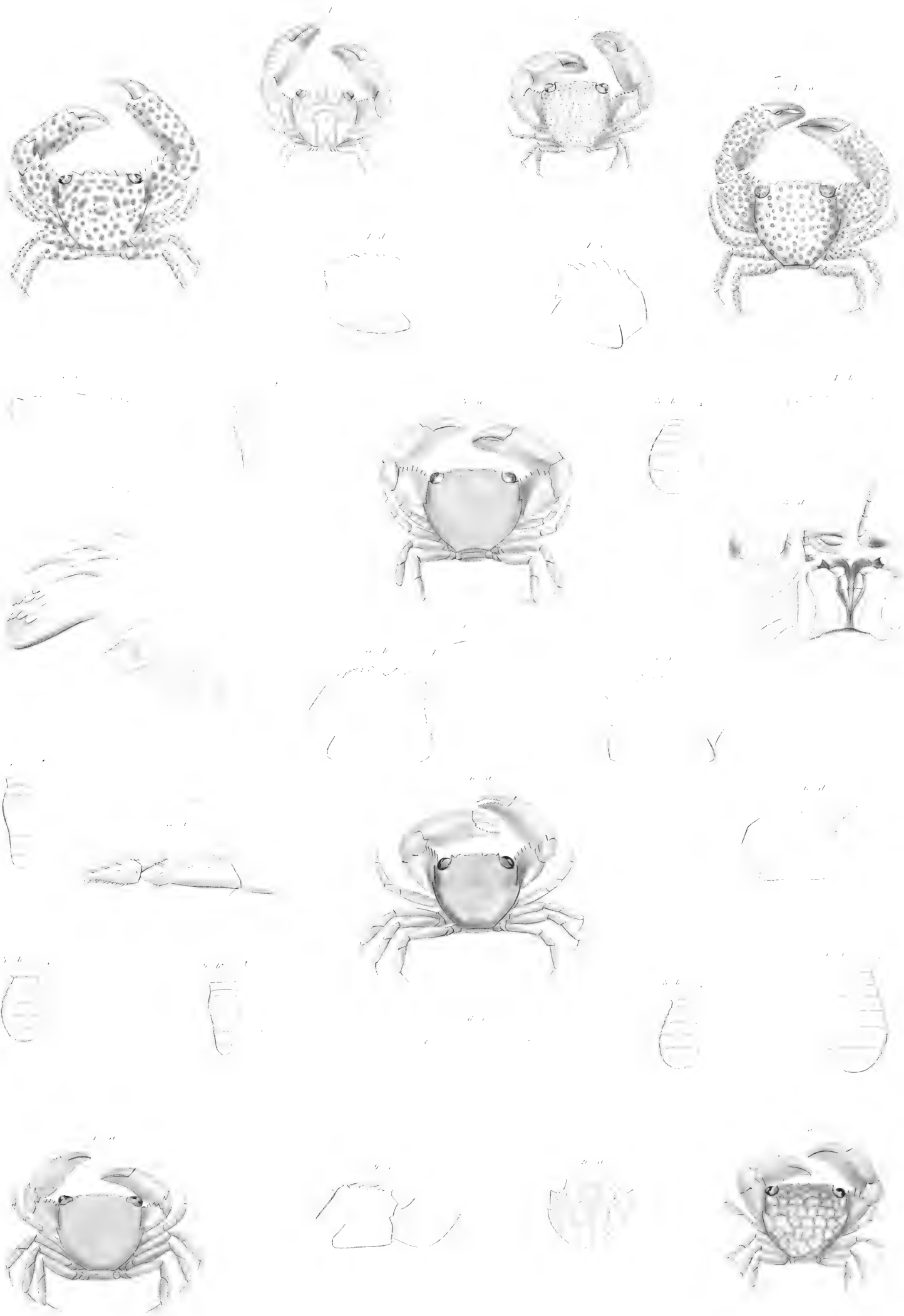




1 a, d. Melina tessellata.  
2 a, e. Actinurus tomentosus.  
3 a, b. Ruppellia annulipes.

5 a, b. Eriphia scabricula.  
6 a, d. Eriphia armata.  
7 a, c. Eriphia levimana.  
8 Eriphia gonagra.

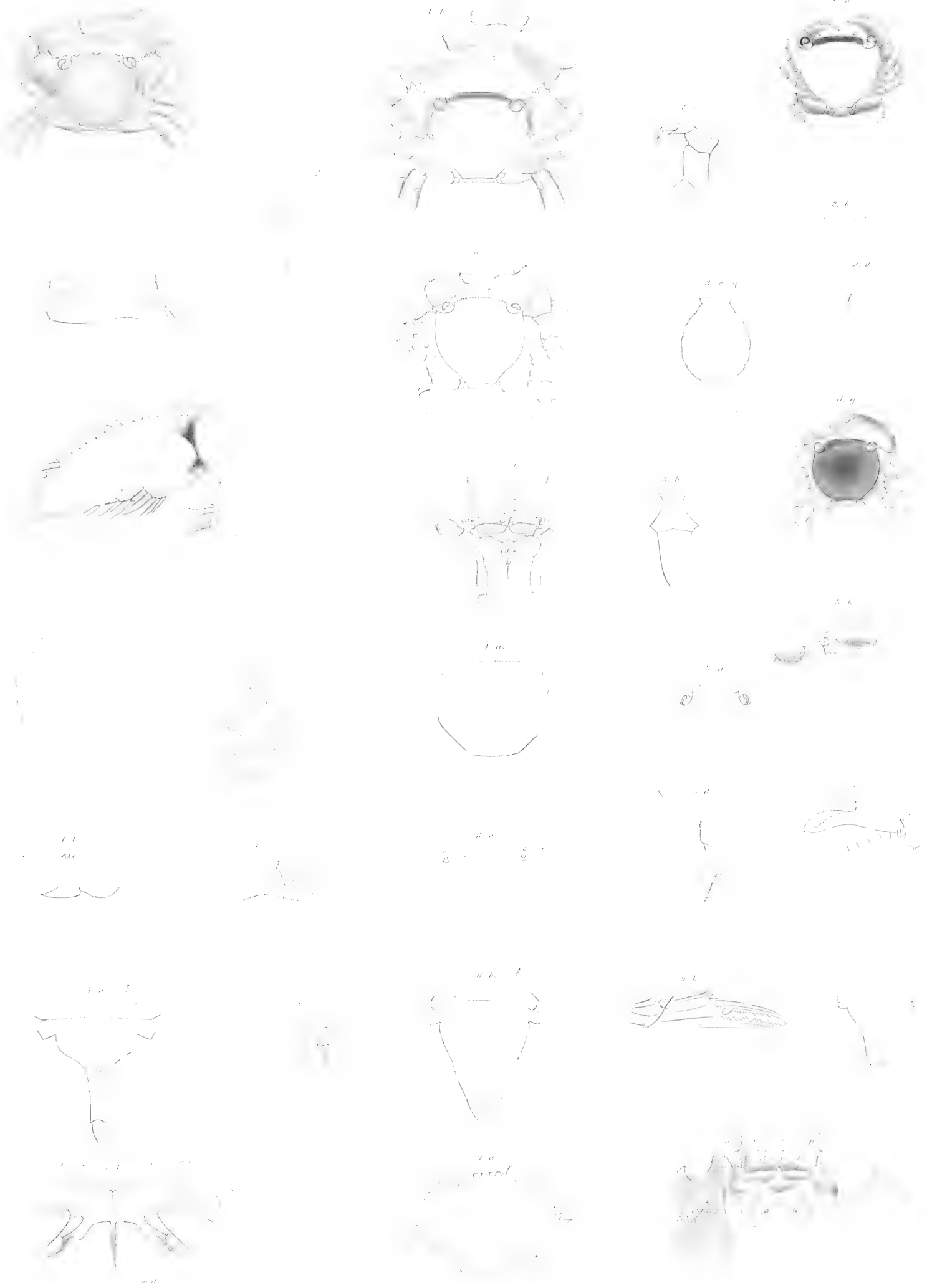




- |         |          |                |         |          |                  |
|---------|----------|----------------|---------|----------|------------------|
| 1.      | Trapezia | speciosa.      | 5 a. c. | Trapezia | cymodoce         |
| 2.      |          | bella.         | 6 a. d. |          | dentata          |
| 3 a. b. |          | rufo punctata. | 7 a. b. |          | var. subintegra. |
| 4 a. d. |          | maculata.      | 8 a. b. |          | arcuolata        |
|         |          |                | 9 a. c. | Trapezia | arcuolata var.   |







1 a, b. *Trapezia ferruginea*.  
 2 a, d. *Tetralia nigritrons*.  
 3 a, c. *Tetralia glaberrima*.  
 4 a, e. *Tetralia armata*.

9 a, c. *Lupa pubescens*.

5 a, d. *Quadrella coronata*.  
 6 a, b. *Seylla tranquebarica*.  
 7 a, c. *Lupa diantha*.  
 8 a. *Lupa Sayi*.





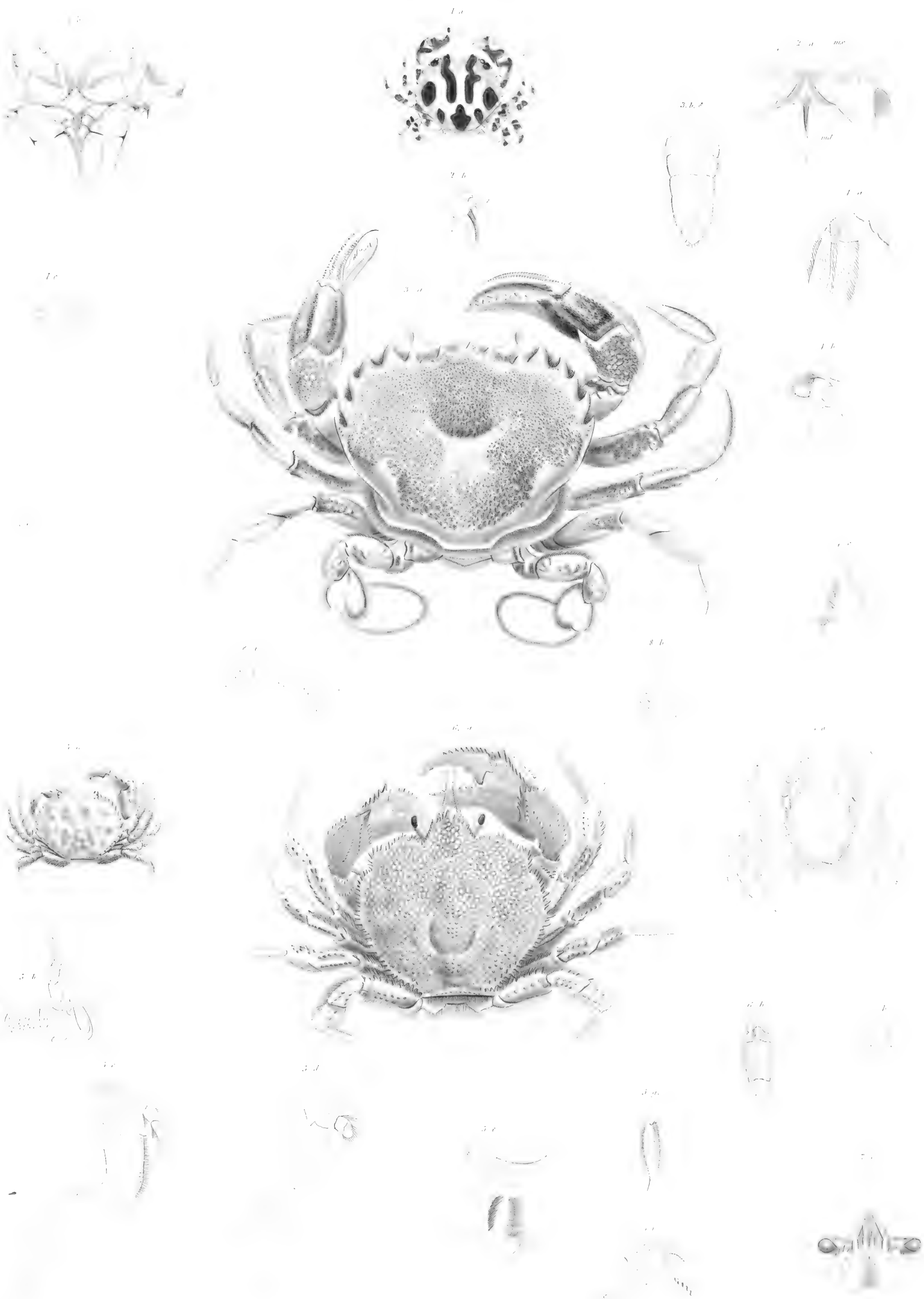
- 1 a d. *Amphirite speciosa*  
 2 a c. — *longispinosa*  
 5 a d. — *vigilans*  
 1 a c. *Carupa tenuipes*

- 5 a c. *Thalamita admete*  
 6 a d. — *integra*  
 7 a b. — *crenata*  
 8 a c. — *spinimana*  
 9 a d. — *crassimana*

10. *Charybdis orientalis*  
 11 a c. — *crucifera*  
 12 a c. — *affinis*  
 15





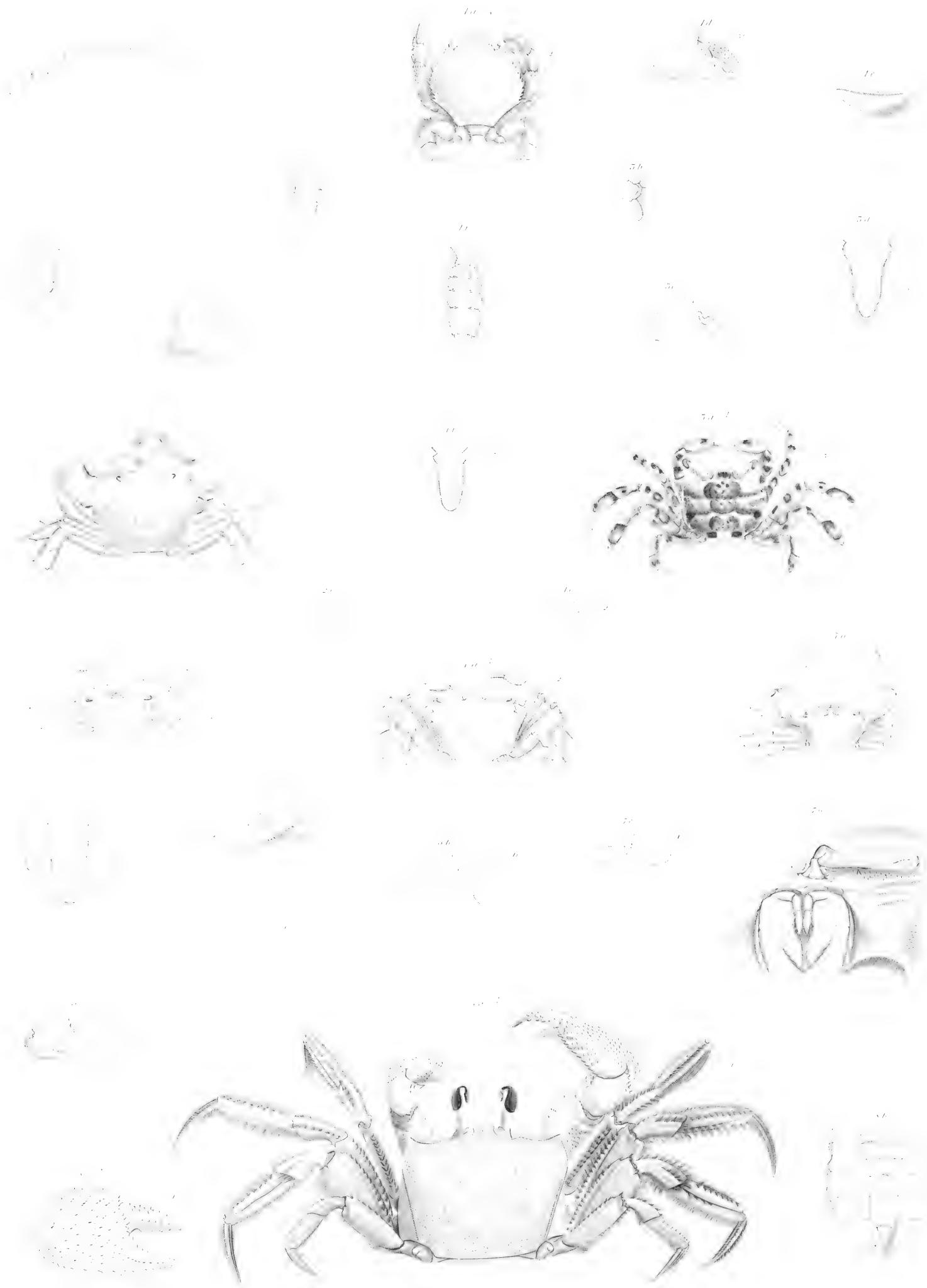


- 1 a. c. *Lissocarcinus orbicularis*.  
 2 a. b. *Arenaeus cribrarius*.  
 3. *Platyonychus purpureus*.  
 4 a. c. *Acanthocyclus Gayi*.

- 5 a. c. *Trichocera oregonensis*.  
 6 a. b. *Peltarion spinulosum*.  
 7. *Gomeza serrata*.  
 8 a. b. *Telmessus serratus*.

Drawn by J. D. Dana

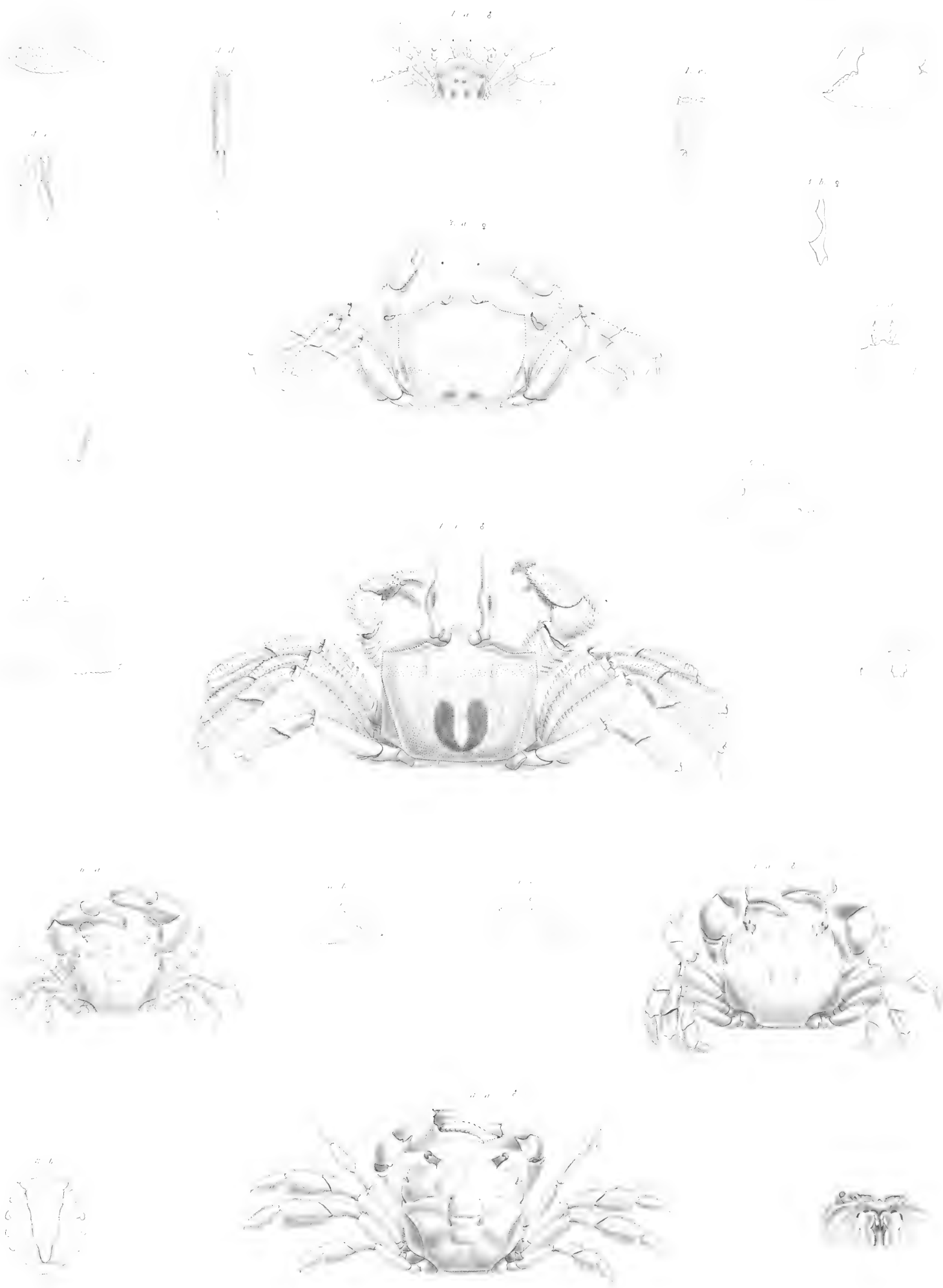




- 1 a . f. *Kraussia rugulosa*.  
 2 a . d. *Euerate crassimanus*.  
 3 a . d. *Cleistostoma Boscii*?  
 4 a . e. *Macrophthalmus pacificus*.

- 5 a . d. *Gelasimus nitidus*.  
 6 a . b. *Helcecius cordiformis*.  
 7 a . e. " *inornatus*.  
 8 a . e. *Ocypoda rhombea*.





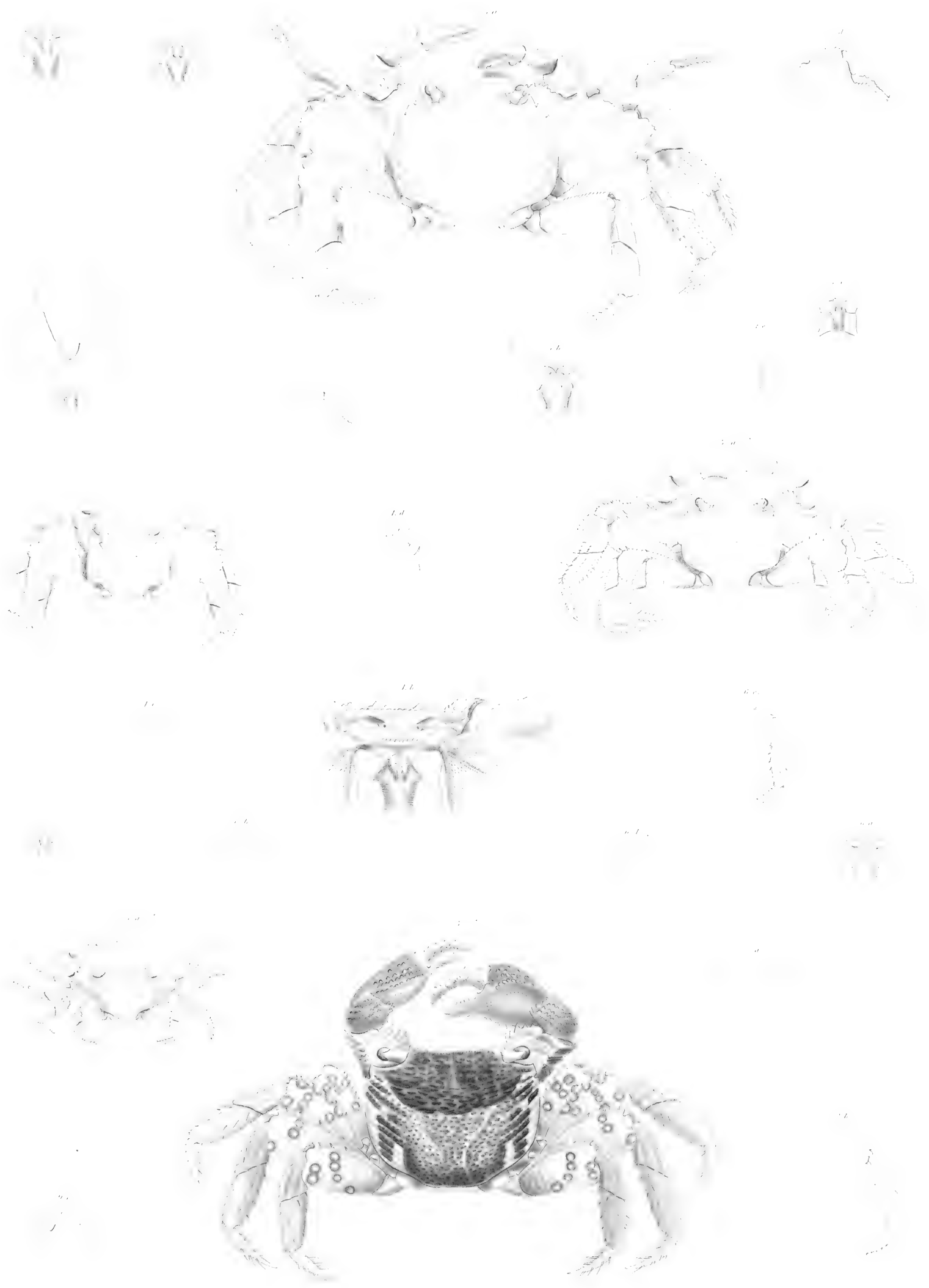
- |         |         |                      |
|---------|---------|----------------------|
| 1 a. c. | Ocypoda | pallidula.           |
| 2.      | -       | levis.               |
| 3 a. b. | -       | brevicornis.         |
| 4 a. c. | -       | - var? longicornuta. |

- |         |               |              |
|---------|---------------|--------------|
| 5 a. c. | Ocypoda       | laxilla.     |
| 6 a. b. | Pseudograpsus | oregonensis. |
| 7 a. c. | -             | nudus.       |
| 8 a. b. | Trichopus     | litteratus.  |

Drawn by J.D. Dana







1 Grapsus pictus.  
2 strigosus.  
3 a., e. planifrons.  
4 a., d. — — longitarsis.

9 a., e. Goniograpsus innotatus

5 a., c. Grapsus lividus  
6 a., d. erinipes.  
7 Goniograpsus cruciatus.  
8 a., b. simplex.





1 a. i. *Planes cyanus*.  
 2 a. e. *Hemigrapsus sexdentatus*.  
 3 a. d. *crenulatus*.  
 4 a. d. *crassimanus*.  
 5 a. e. *affinis*.

6 a. e. *Cyrtograpsus angulatus*.  
 7 a. e. *Sesarma angustipes*.  
 8 a. e. *trapezium*.  
 9 a. d. *obtusifrons*.  
 10 a. e. *obesum*.







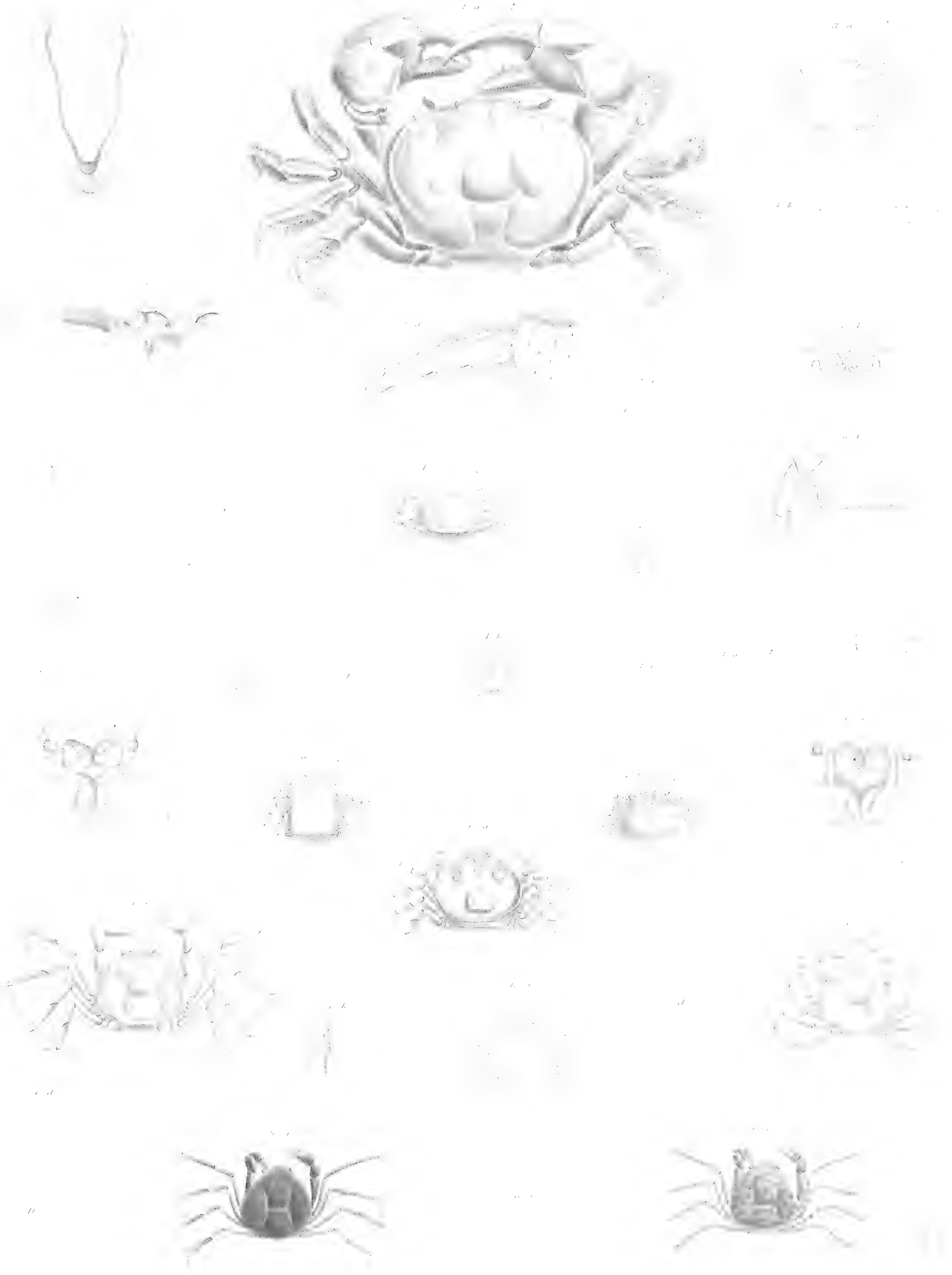
1 a. d. Sarmatium crassum.  
 2. Cyclograpsus Audouinii.  
 3 a. e. ——— cinereus.  
 4 a. e. ——— granulatus.  
 5 a. e. Chasmagnathus subquadratus.

11 a. e. Acanthopus abbreviatus.

6 a. d. Chasmagnathus granulatus.  
 7 a. d. ——— mevis.  
 8 a. d. Helice crassa.  
 9. Plagusia speciosa.  
 10 a. d. ——— glabra.

W. H. K. 1886.

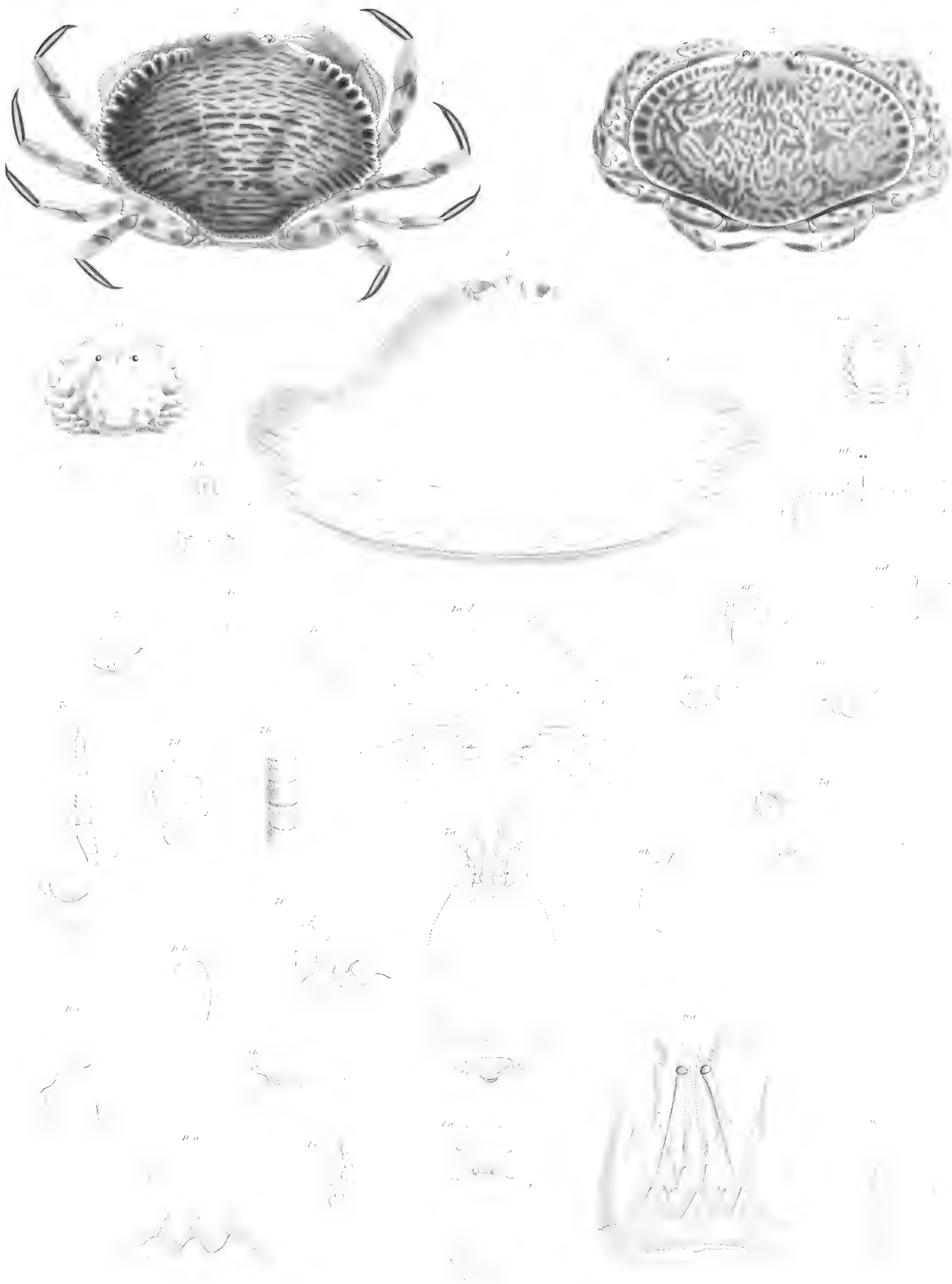




1. Cardisoma obesum.  
2. a. d. lurtipes.  
3. a. r. Pinnothera obesa.  
4. a. c. faba.  
5. a. c. Fabia subquadrata.

6. a. b. Nanthasia murigera.  
7. a. b. Halicarcinus planatus.  
8. pubescens.  
9. a. d. 10. Hymenicus varius.  
11. a. c. pubescens.





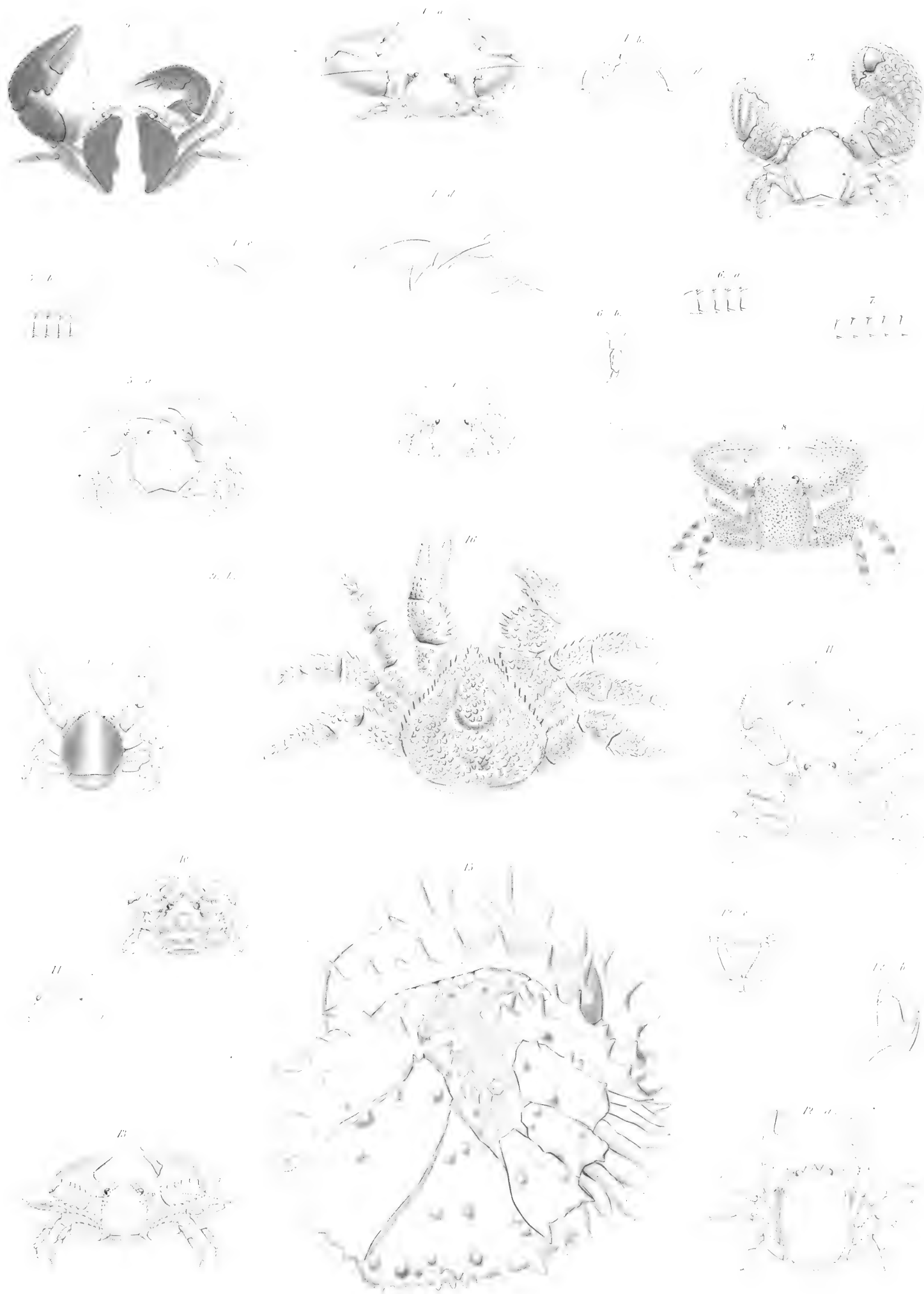
1. Calappa fornicata.
2. Hepatus angustatus.
3. Hepatus chilensis.
- 4 a... c. Iphis longipes.
- 5 a... b. Nucia speciosa.

- 6 a... f. Alburna speciosa.
- 7 a... g. Remipes pacificus.
- 8 a... c. hirtipes.
- 9 a... c. Hippa emerita.
- 10 a... c. talpoides.

Drawn by J. B. Leach.







- 1 a. d. *Porcellana biunguiculata*.  
 2. *sculpta*.  
 3. *monilifera*.  
 4. *sulcensis*.  
 5. a. b. *valida*.

6. a. b. *Porcellana violacea*.  
 7. *granulosa*.  
 8. *speciosa*.  
 9. a. b. *mitra*.  
 10. *tomentosa*.  
 11. *Boscii*.

12. a. c. *Porcellana angusta*.  
 13. *scabricula*.  
 14. *armata*.  
 15. *Lithodes antarctica*.  
 16. *verrucosa*.

*Drawn by J. B. Dana.*

*R. H. Donnell S.*





- 1 a, c., *Bernhardus novi-zealandiae*.  
 2 a, c., *annatus*.  
 3 a, b., *hirsutiusculus*.  
 4 a, c., *scabriculus*.  
 5 a, d., *obesocarpus*.

- 6 *Bernhardus squimmanus*.  
 7 a, c., *tenimanus*.  
 8 a, c., *eriniticorus*.  
 9 a, b., *Diogenes miles*.  
 10 a, g., *eustus*.

*Descript. by J. B. Dana*

*W. H. Douglas Sc.*





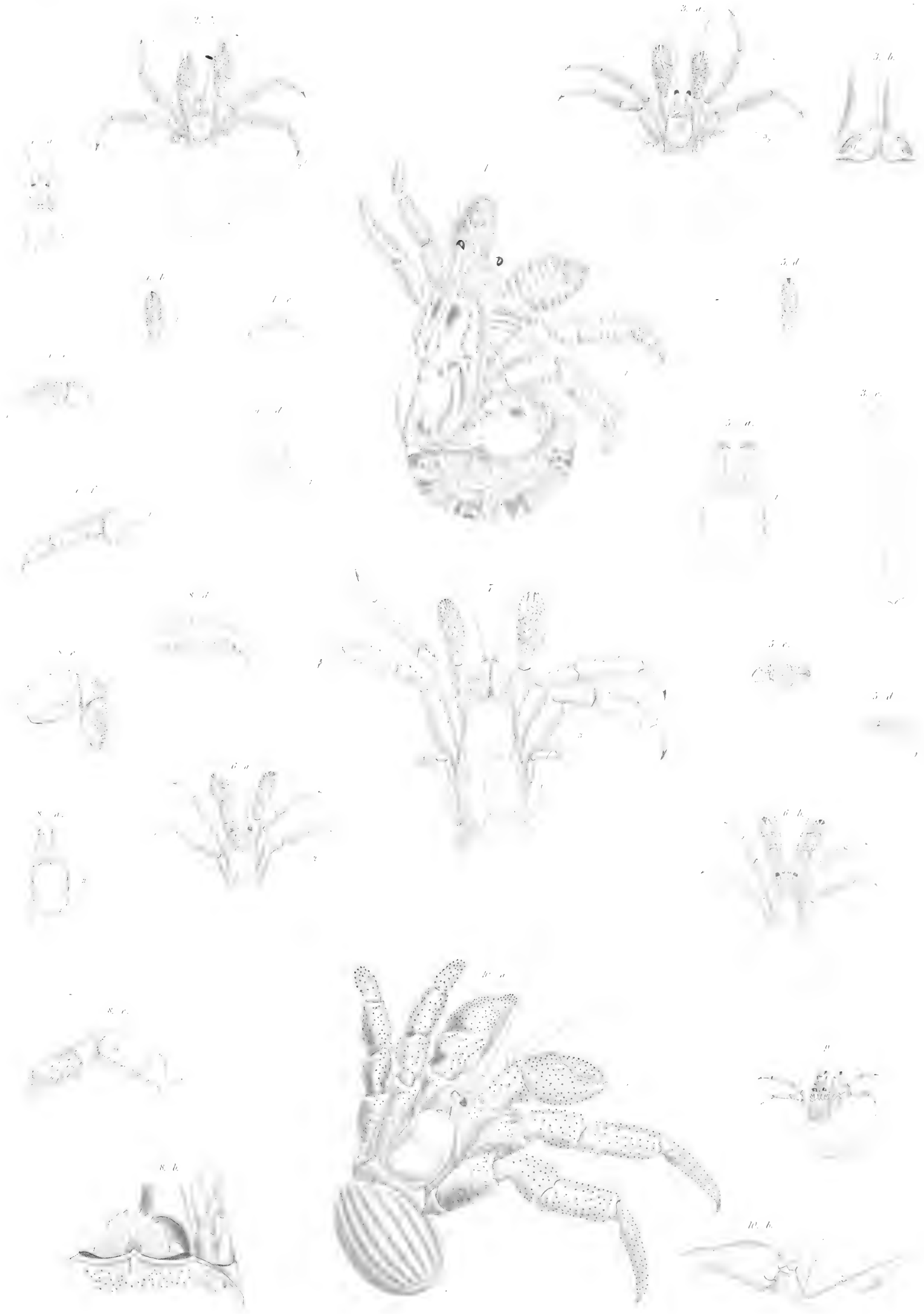


- |            |                          |
|------------|--------------------------|
| 1 a. b.    | Paguristes longirostris. |
| 2 a. c. f. | hirtus.                  |
| 3 a. b.    | Pagurus guttatus.        |
| 4 a. b.    | punctulatus.             |
| 5 a. c.    | spinimanus.              |

- |          |                     |
|----------|---------------------|
| 6 a. c.  | Pagurus euopsis.    |
| 7 a. c.  | fabimanus.          |
| 8 a. c.  | scabrimanus.        |
| 9        | Calcinus Gaimardii. |
| 10 a. c. | elegans.            |

11 Calcinus latens.



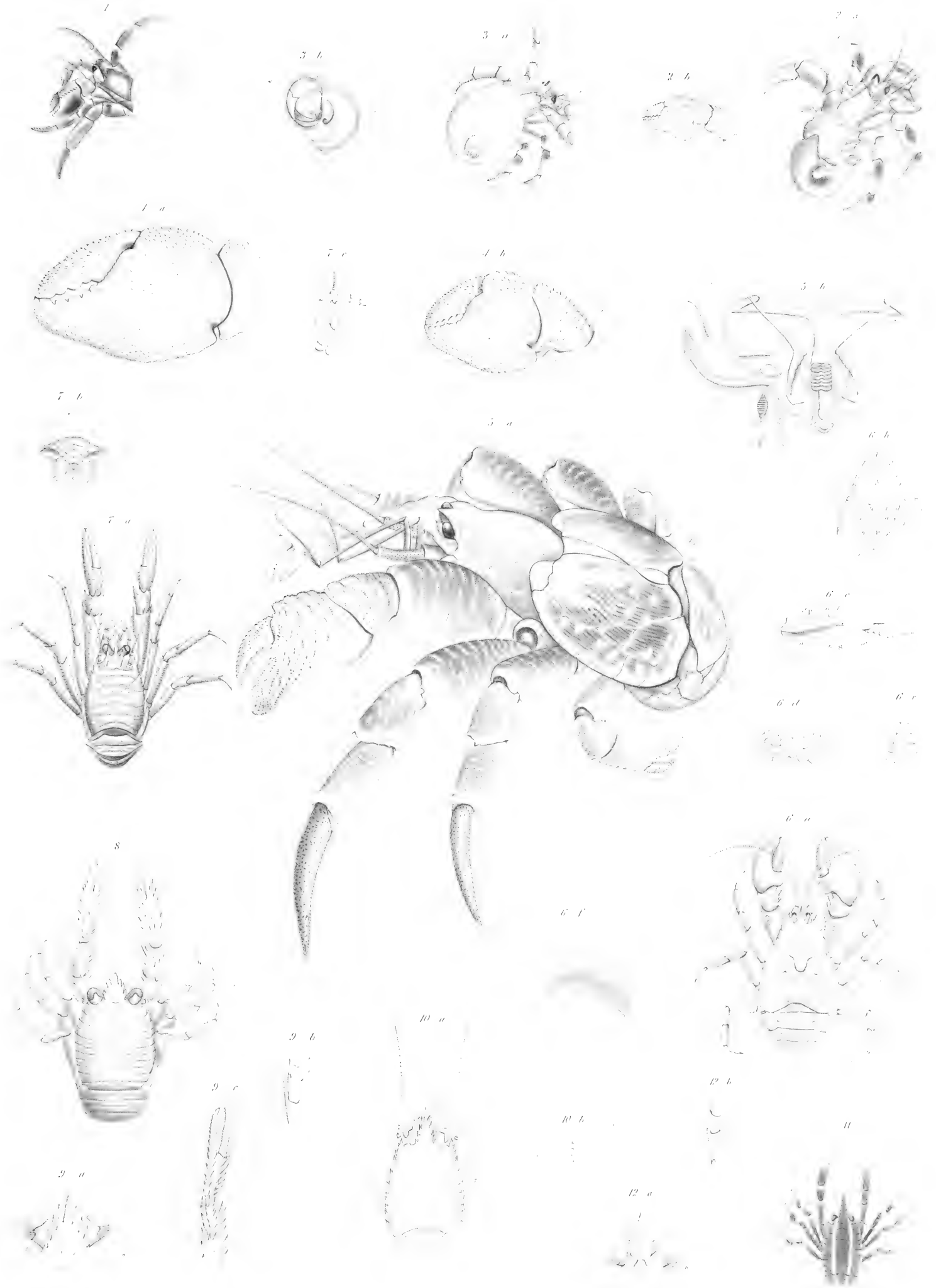


- 1 Aniculus typicus.  
 2 Clibanarius lineatus.  
 3 a, c. striolatus.  
 4 a, c. squabilis.  
 5 a, d. zebra.

Drawn by J. B. Dana

- 6 a, b. Clibanarius virescens.  
 7. brasiliensis.  
 8 a, c. corallinus?  
 9. humilis.  
 10 a, b. Cenobita brunea.





1 *Cenobita rugosa*  
 2 a, b *var. pulchra*  
 3 a, b *canescens*  
 4 a, b *elypeata*

5 a, b *Rigus latro*  
 6 a, b *Agilis levis*  
 7 a, b *Amida subrugosa*  
 8 *Galathea latirostris*

9 a, c *Galathea spinosirostris*  
 10 a, b *vittatus*  
 11 *longirostris*  
 12 a, b *integirostris*







- 1 a. c. Grimothea gregaria.
- 2 a. i. Marestia elegans.
- 3 a. g. atlantica.
- 4. pervalida.
- 5 a. g. Monolepis orientalis.

- 6 Monolepis micrus.
- 7 a. f. Cyllene hyalina.
- 8 a. d. furciger.
- 9 Tribola lata.
- 10 a. c. pubescens.

Drawn by J.D. Dana.





- 1 n. d. *Gobia puggottensis*.  
2 n. e. — *hirtifrons*.  
5 n. d. *Callinassa gigas*.

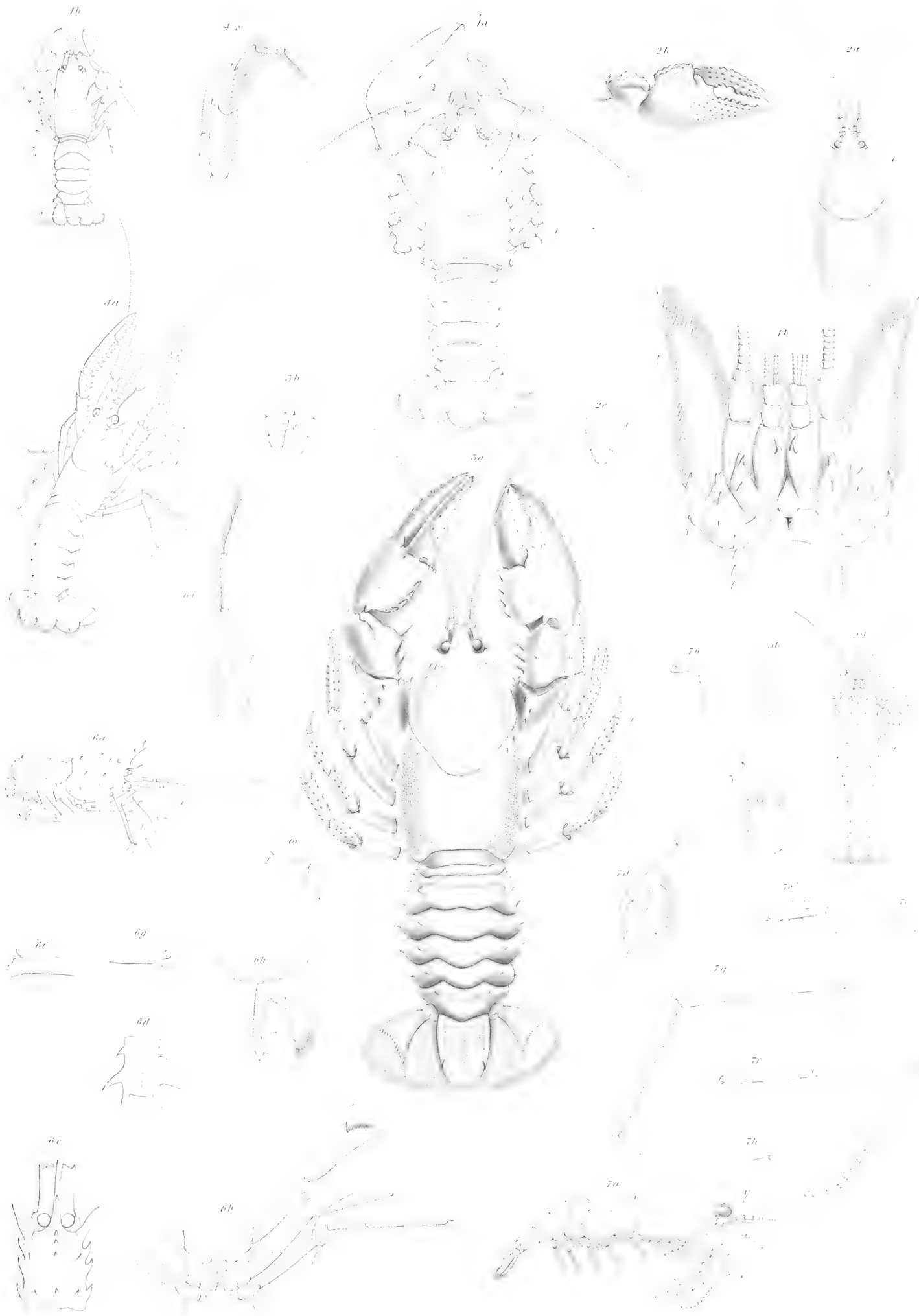
Drawn by J. H. Jones.

- 7 n. e. *Arctus vittatus*.

- 4 n. e. *Trypaea australiensis*.  
5 n. e. *Thalassina gracilis*.  
6 *Parribacus antarcticus*.







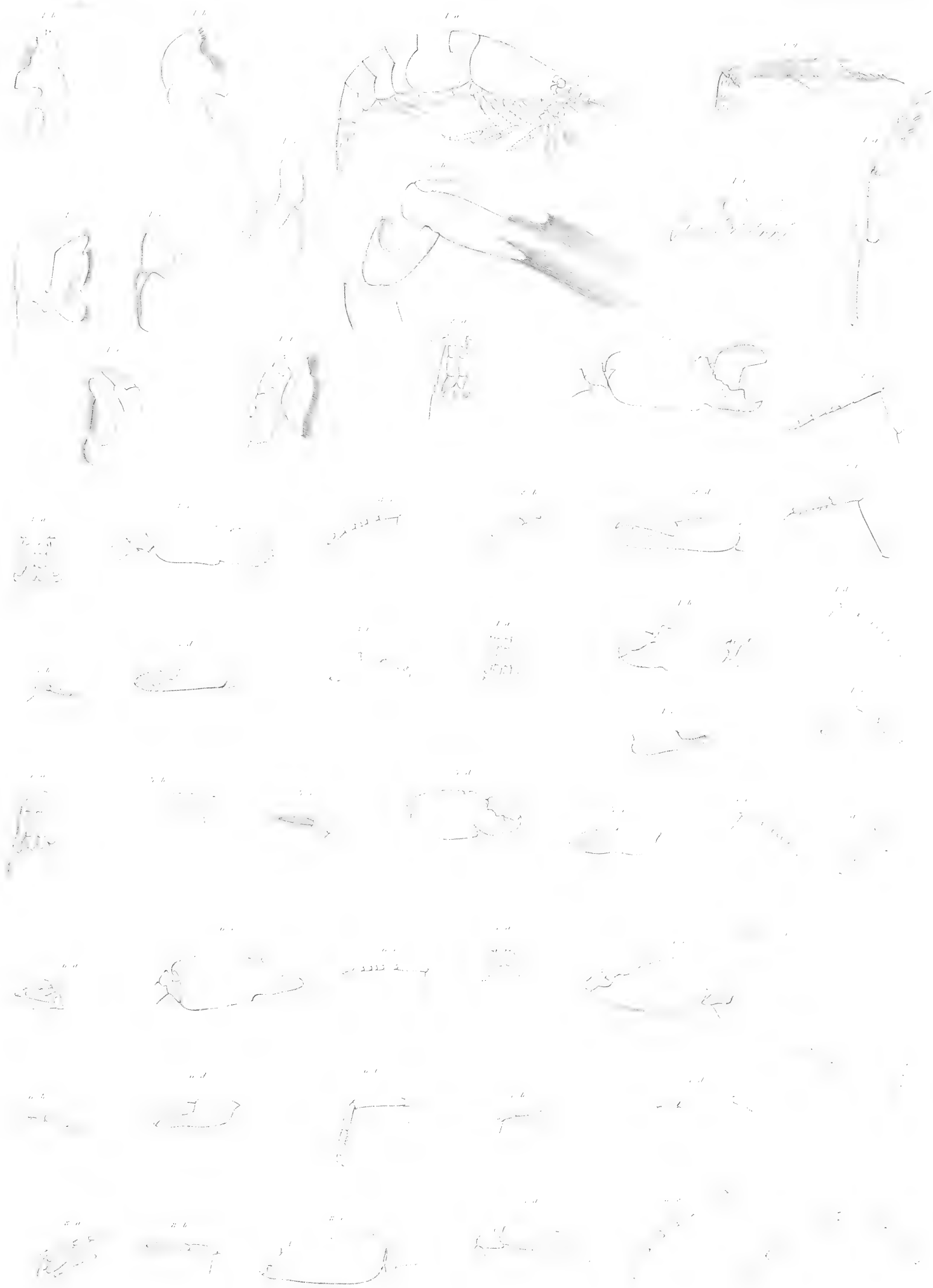
- 1 a. b. *Astacus leniusculus*.  
2 a. c. *Cambarus bartonii*.  
3 a. b. *Astacoides nobilis*.

- 4 a. c. *Paraneoprops tenuicornis*.  
5 a. b. *Crangon monitus*.  
6 a. i. *Paracrangon echinatus*.

- 7 a. h. *Nika hawaiiensis*.

Drawn by J.D. Dana.

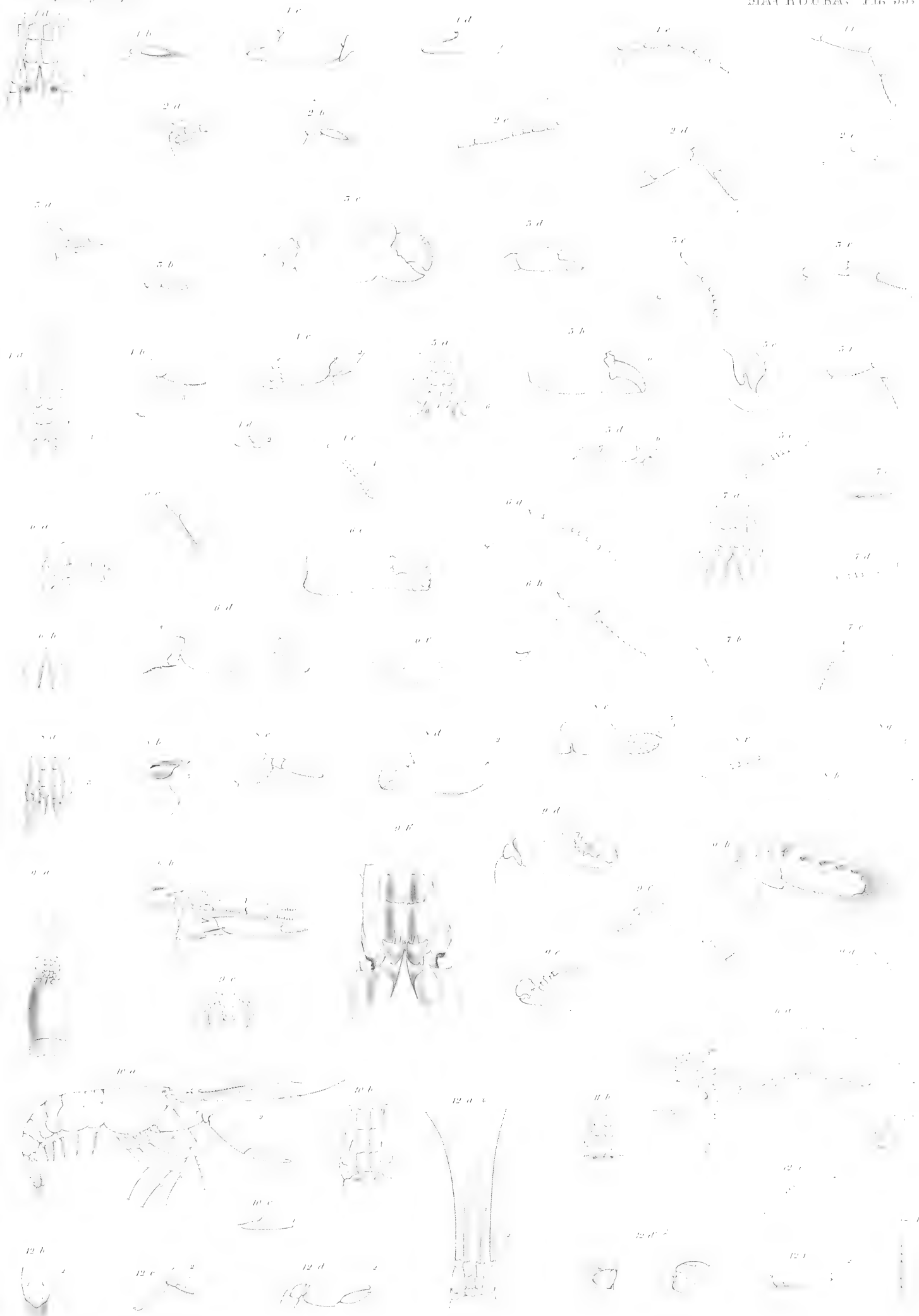




1 a i Atyoida bisulcata.  
 2 a f Alpheus Edwardsii.  
 5 a f leviusculus  
 1 a e strenuus.

5 a g Alpheus pacificus.  
 6 a f enchirus.  
 7 a f obeso manus.  
 8 a f erinitus.





1 a . . f Alpheus mitis  
2 a . . e acutifemuratus  
3 a . . f parvirostris  
4 a . . e tridentulatus

5 a . . f Alpheus neptunus  
6 a . . h pugna  
7 a . . e diadema  
8 a . . h laevis

9 a . . h Alpheus malleator  
10 a . . e Betaeus truncatus  
11 a . . b acquimatus  
12 a . . f scabrodigitus.



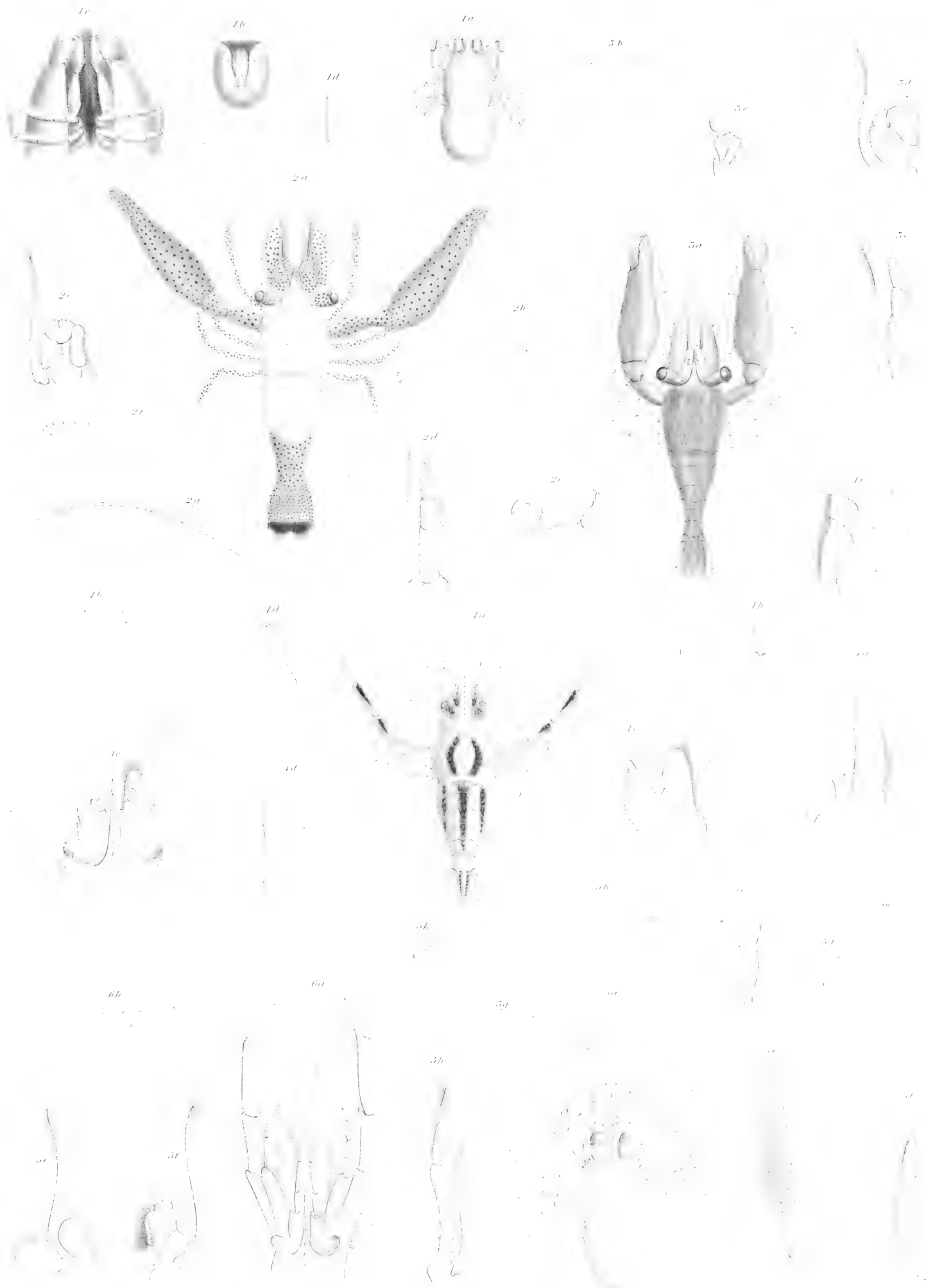




- 1 a, c. *Hippolyte acuminatus*.  
 2 a, d. *exilirostratus*.  
 3 a, f. *obliquimanus*.  
 4 a, e. *gibbosus*.

5. *Hippolyte curvirostris*.  
 6 a, d. *lanellicornis*.  
 7 a, c. *Rhyncecinetes typicus*.  
 8. *Pandalus pubescens*.





1 a, d. *Pontonia tridacna*  
 2 a, f. *Oedipus superbus*  
 5 a, c. *gramineus*.

1 a, b. *Harpilius lutescens*  
 5 a, m. *Anchistia gracilis*  
 6 a, b. *longimana*.







- 1 a. g. *Anchistia cusifrons*  
 2 a. d. *aurantiaca*  
 3 a. d. *Palaemonella tenuipes*  
 4 a. d. *orientalis*

- 5 a. g. *Palaemon affinis*  
 6 *debilis*  
 7 *exilius*  
 8 *squilla*  
 9

- 10 a. b. *Palaemon concinnus*  
 11 *natafor*  
 12 a. b. *grandimanus*  
 13 a. b. *lanceifrons*

Drawn by J. B. Dana.





1 a a b. Palaemon acutirostris  
2 a b. equidens.  
5 a c. Hymenocera picta

4 a b. Cryphops spinulosus manus  
5 a q. Regulus lucidus  
6 a b. erinitus



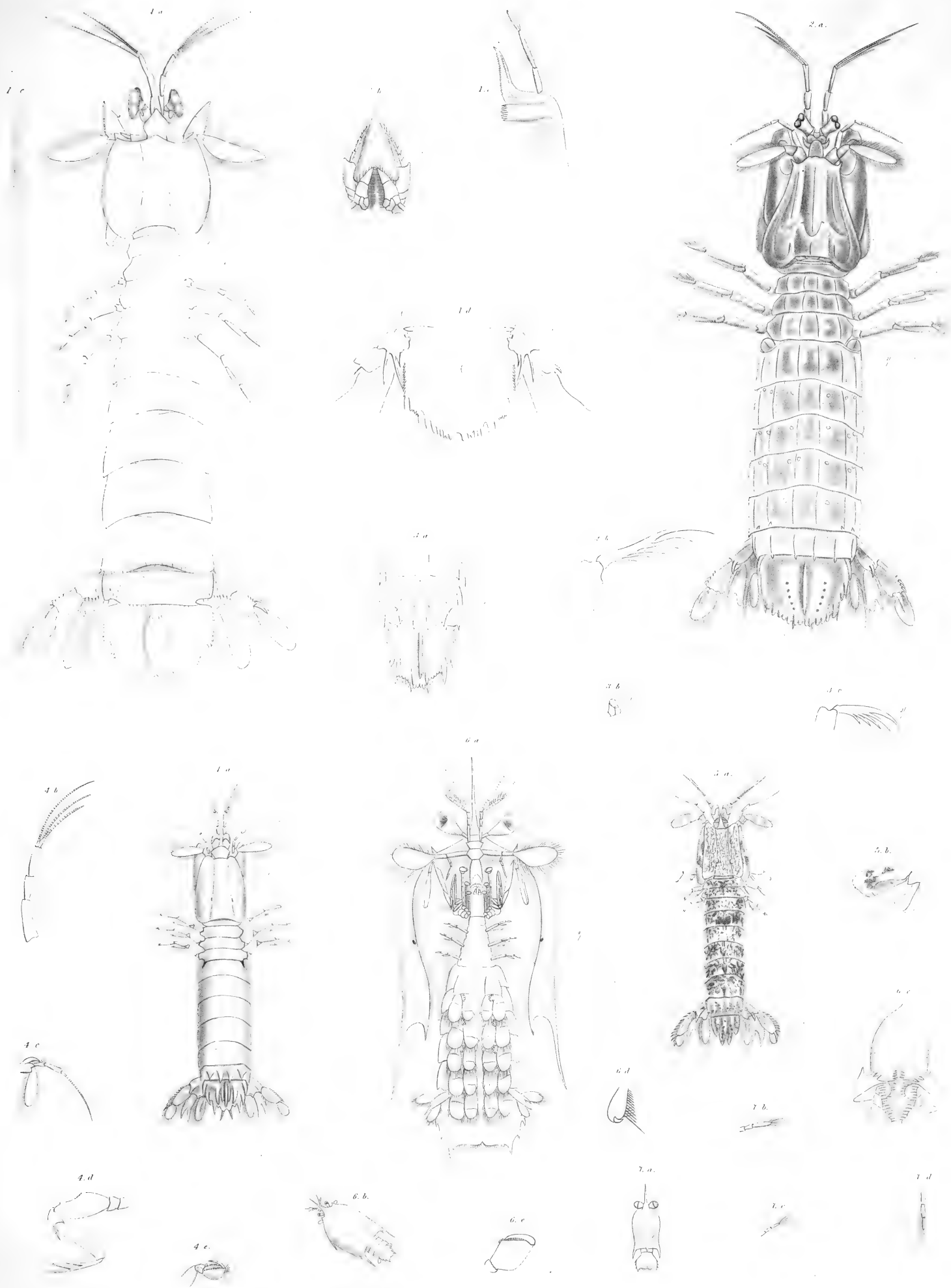


- |   |          |             |
|---|----------|-------------|
| 1 | Sicyonia | carinata.   |
| 2 | Penaeus  | carinatus.  |
| 5 |          | avirostris. |
| 1 |          | velutinus.  |
| 5 |          | monoceros.  |

- |    |         |                    |
|----|---------|--------------------|
| 6  | Penaeus | tenuis.            |
| 7  | a. b.   | gracilis.          |
| 8  |         | Stenopus hispidus. |
| 9  |         | cusiferus.         |
| 10 | a. m.   | Eucopia anstralis. |







1 a. e. *Lysiosquilla inornata*.  
2 a. b. *Squilla rubro-lineata*.  
3 a. c. — *prasino-lineata*.

7 a. d. *Erichthus vestitus*.

4 a. e. *Pseudosquilla stylifera*.  
5 a. b. *Gonodactylus chiragra*.  
6 a. e. *Erichthus palliatus*.





- 1 a, c, Eriothus spiniger.  
2 a, f, Alima angusta.  
3 a, d, Eriothina demissa.

- 1 a, m, Euphausia pellucida.  
5 a, h, splendens.  
6 a, c, gracilis.







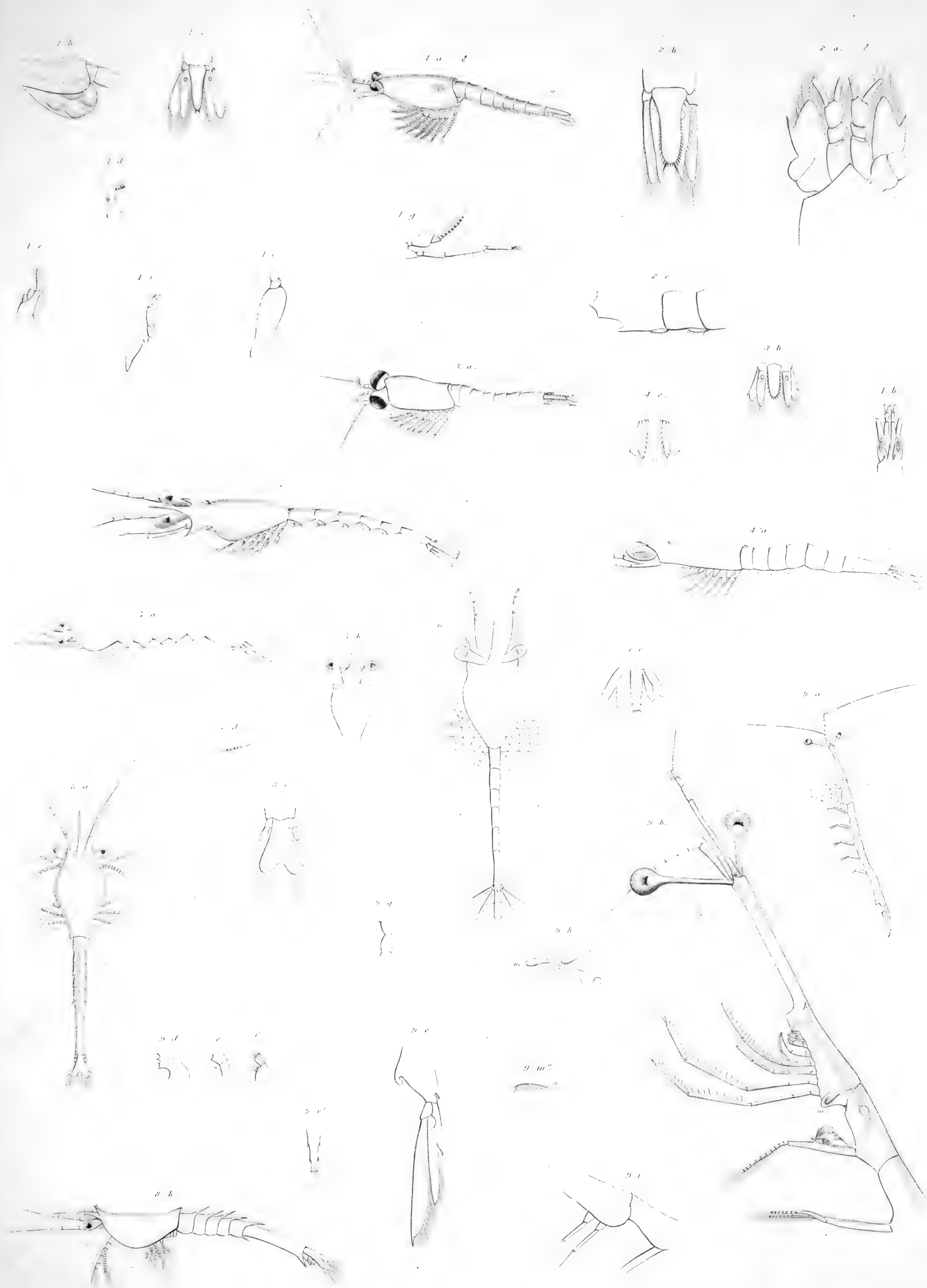
1 a, n. Euphausia superba.  
2 a, b Cystopia rostrata.  
3 a, b

4 a, c. Promysis orientalis.  
5 a, m. Macromysis gracilis.  
6 a, m. Siriella vitrea.

Drawn by H. J. Stoll

W. H. Dall del.





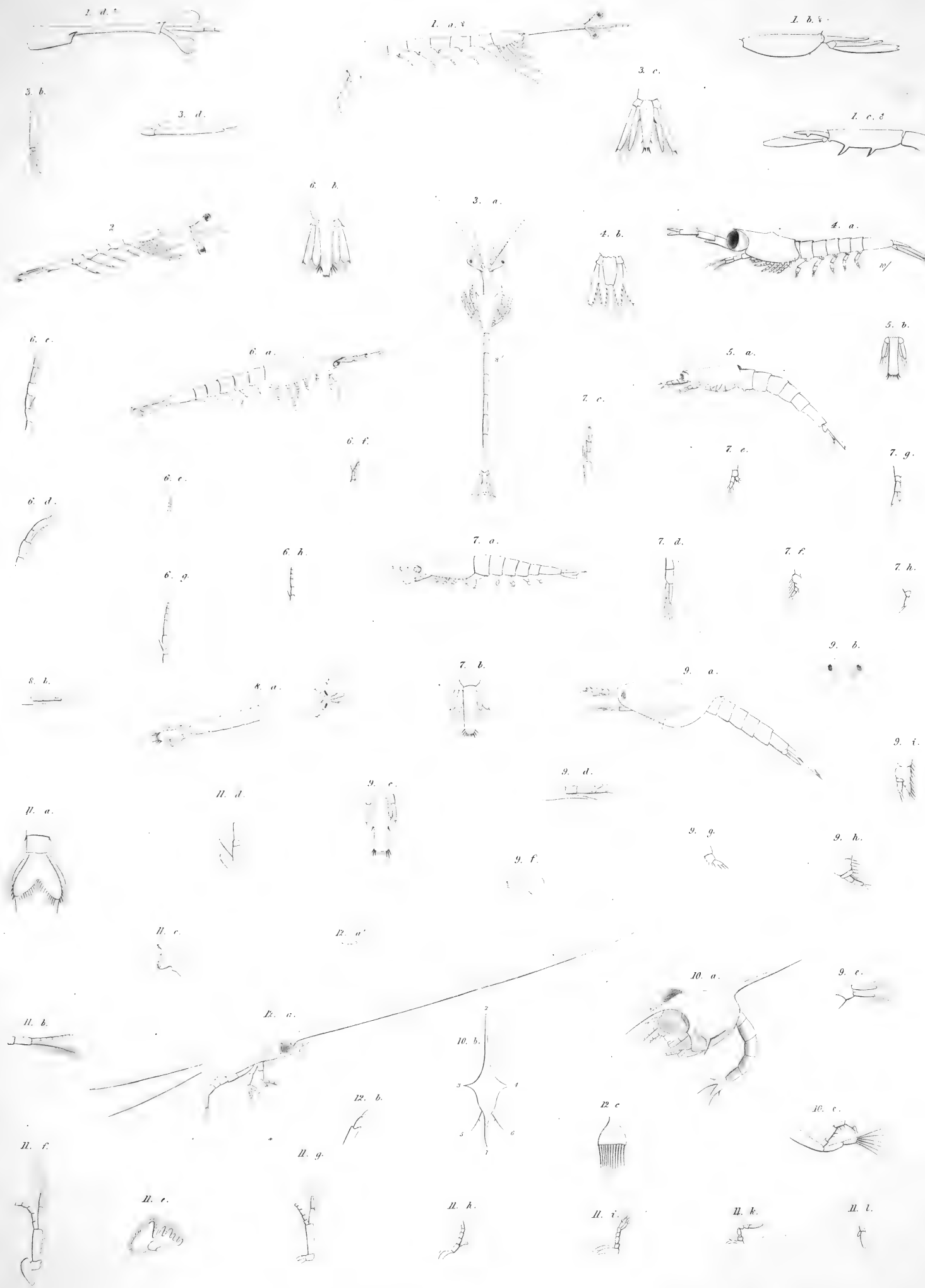
1 a, g. 2 a, c. Siriella gracilis.  
 5 a, b. ——— brevipes.  
 4 a, c. Loxopis tridens.  
 5. Sceletina armata.

6. Sceletina laticeps.  
 7 a, d. ——— orientalis.  
 8 a, c. Rachitia spinalis.  
 9 a, i. Lucifer ancestra.

Drawn by J. D. Dana.

W. H. Dall.





1 a . . d. *Lucifer Reynaudi*.  
 2 . . . . . *pacificus*.  
 3 a . . d. . . . . *acicularis*.  
 4 a . . b. *Furcilia macrophthalmia*.

5 a . . b. *Furcilia abbreviata*.  
 6 a . . b. . . . . *microphthalmia*.  
 7 a . . h. . . . . *gracilis*.  
 8 a . . b. . . . . ?

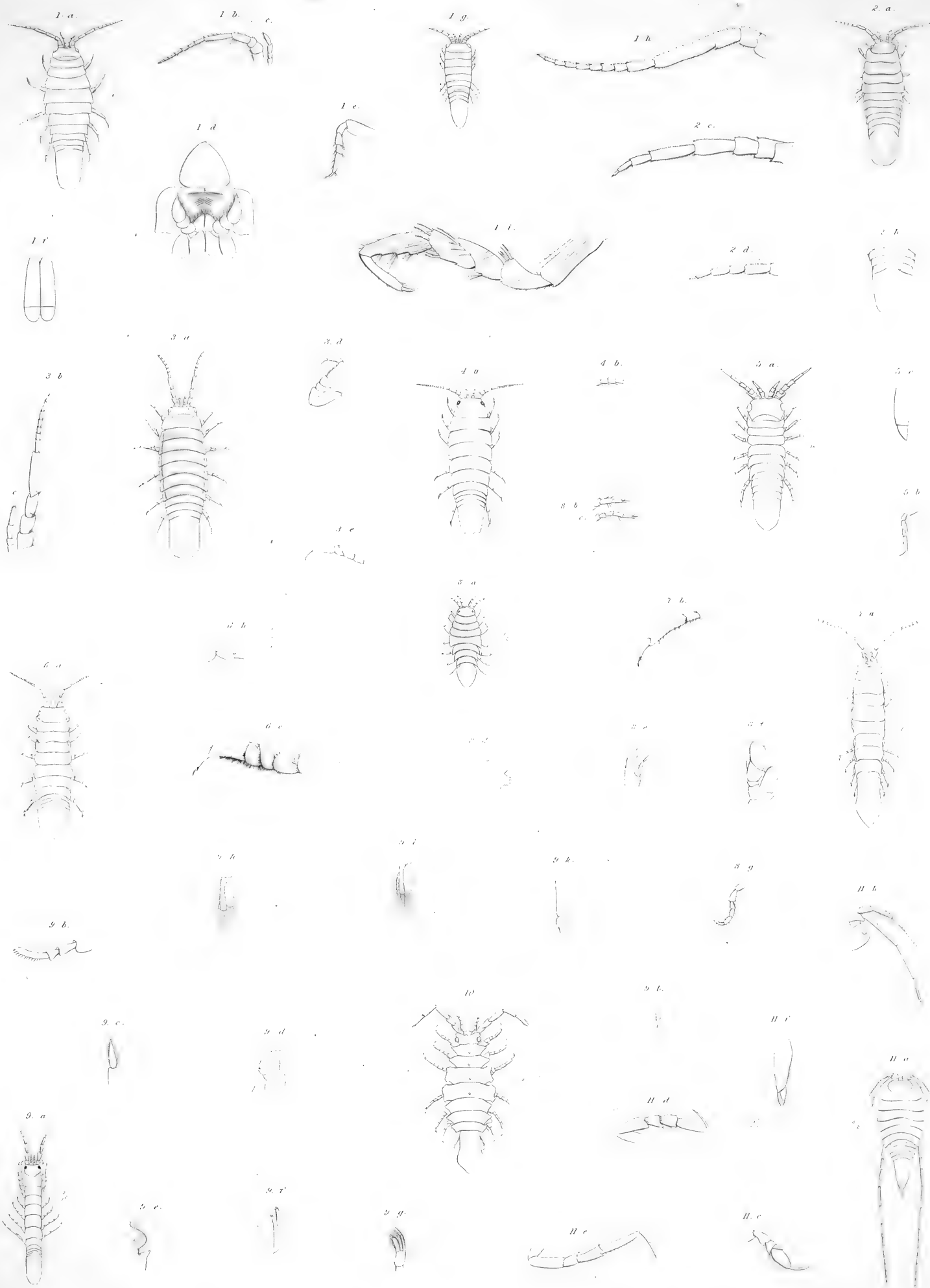
9 a . . i. *Calyptopis integrifrons*.  
 10 a . . c. *Zoea echinus*.  
 11 a . . k. . . . . *rubella*.  
 12 a . . e. . . . . *longispina*.

Drawn by J.D. Dana.

H. H. Deupal. Sc.







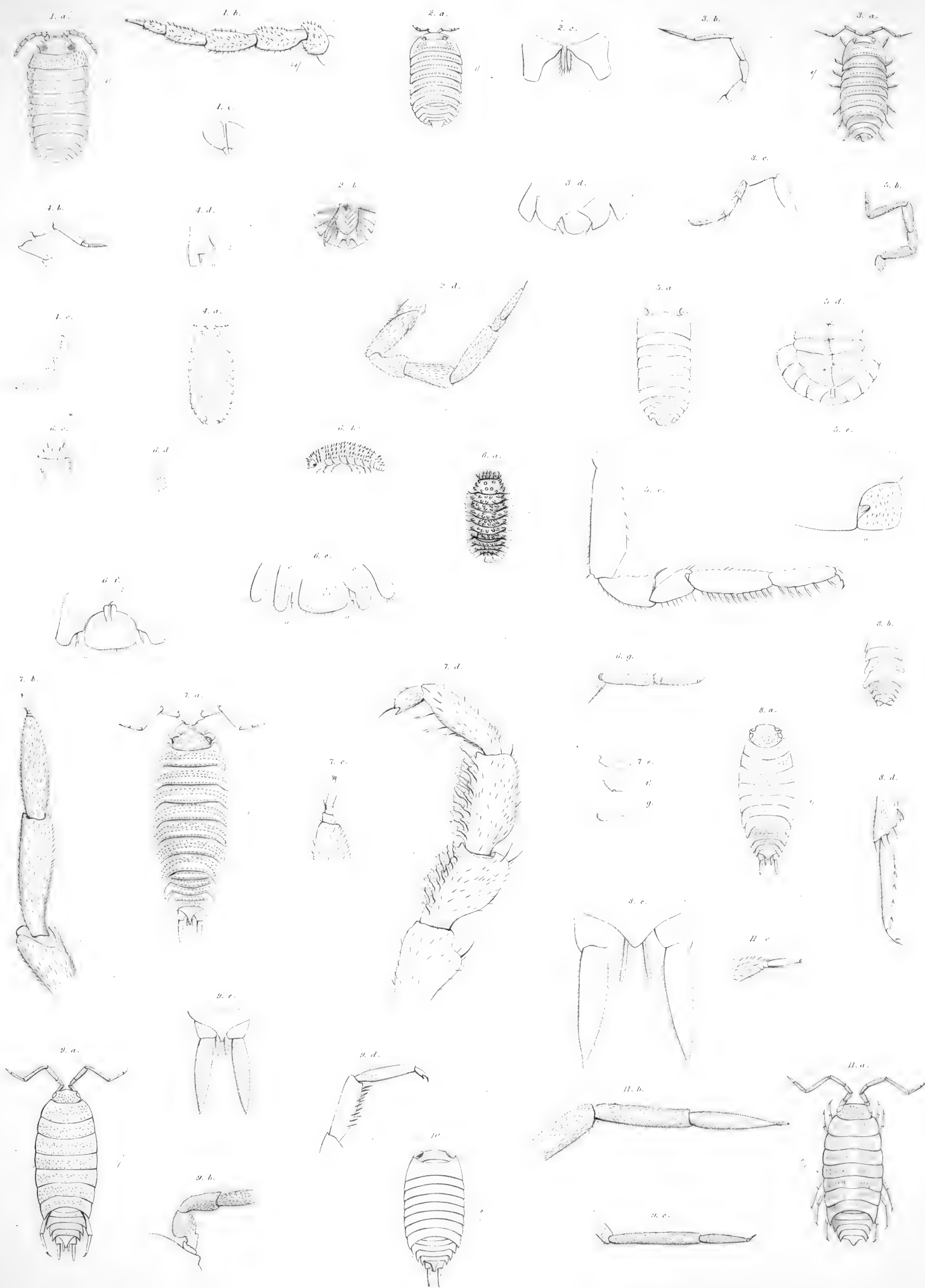
1 a. i. Idotea argentea.  
 2 a. d. ——— margaritacea.  
 3 a. e. ——— annulata.  
 4 a. b. 5 a. c. ——— brevicanda.  
 6 a. c. ——— hirtipes.

7 a. b. Idotea stricta.  
 8 a. g. Epelys annulatus.  
 9 a. l. Cleantis linearis.  
 10. Erichsonia angulata.  
 11 a. f. Chaetilia ovata.

Drawn by J. D. Dana.

W. H. Dall.





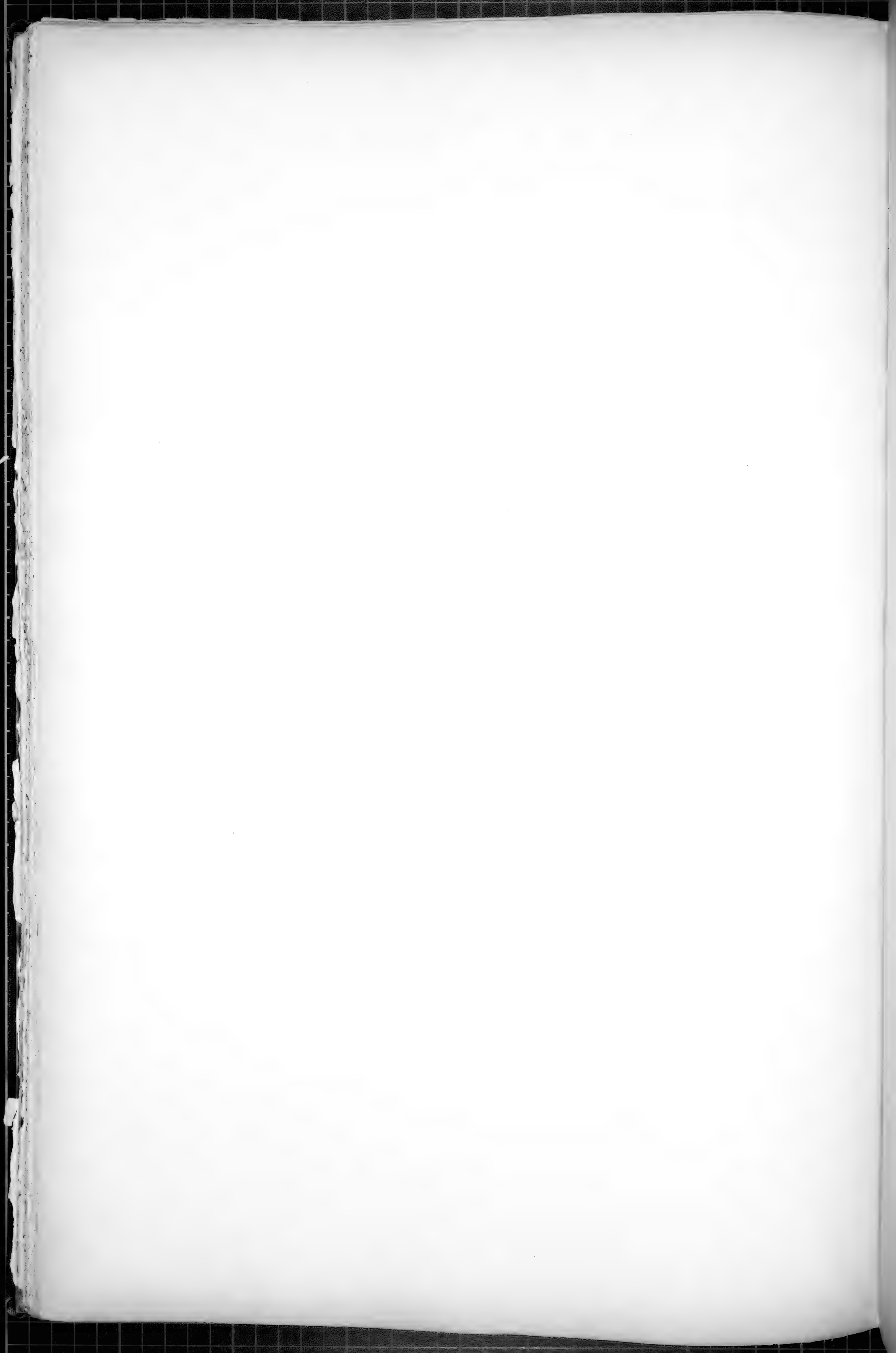
1. a. c. Tylus spinulosus.  
 2. a. d. Armadillo speciosus.  
 3. a. d. Spherillo monolinus  
 4. a. d. — vitiensis.  
 5. a. c. — hawaiiensis.

- 6 a. g. Spherillo spinosus.  
 7 a. g. Porcellio gemmulatus.  
 8 a. d. — ? fuegiensis.  
 9 a. e. — chilensis.  
 10 — ? hawaiiensis.

11 a. c. Porcellio. — ?

Drawn by J. D. Dana

W. H. Dall







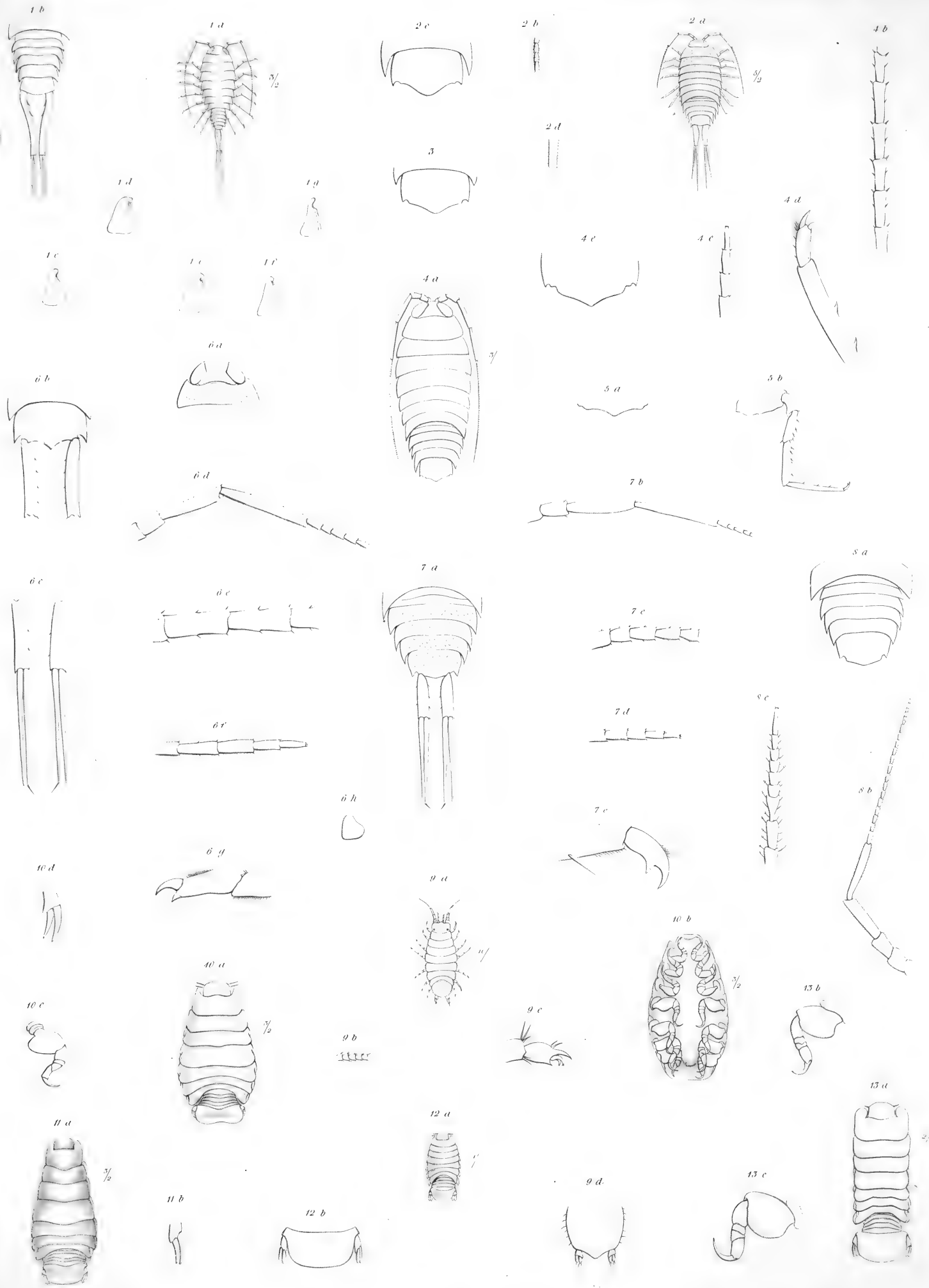
- 1 a...c. *Oniscus nigrescens*.  
 2 a...d. *pubescens*.  
 3 a...d. *angustus*.  
 4 a...f. *maculatus*.

Drawn by J.D. Dana.

- 5 a...p. *Serphax ornatus*.  
 6 a...h. ———— young?  
 7 a...d. *Syloniscus magellanicus*.  
 8 a...b. ———— *longistylis*.

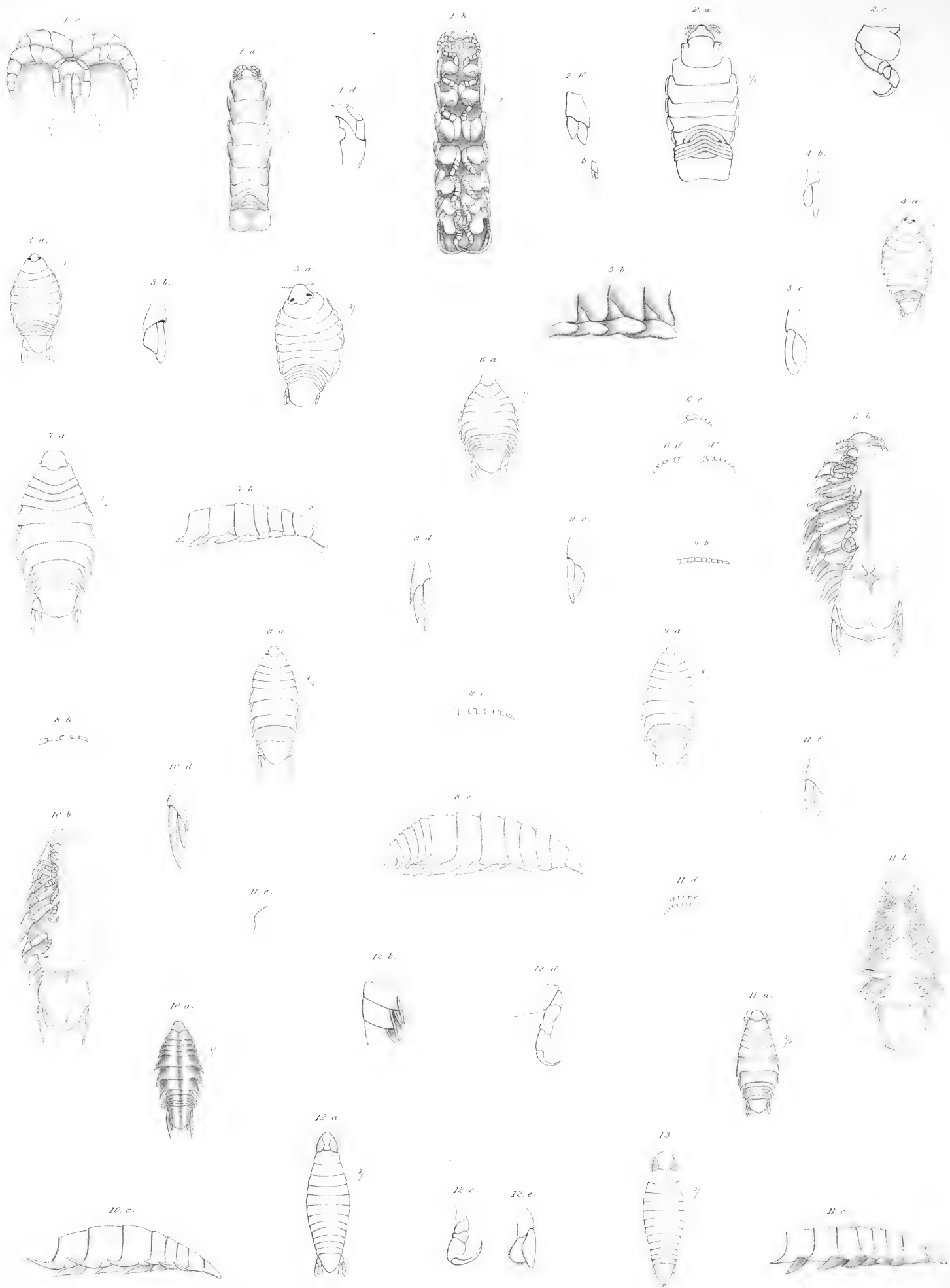
W.D. Hoagland, Sc.





- |              |                    |            |                  |             |                            |
|--------------|--------------------|------------|------------------|-------------|----------------------------|
| 1 a . . . g. | Lygia Ehrenbergii? | 5 a . . b. | Lygia viuiensis. | 9 a . . d.  | Jara pubescens.            |
| 2 a . . d.   | novi-zealandiae.   | 6 a . . h. | Gaudichaudii?    | 10 a . . d. | 11 a . b. Cymothoa excisa. |
| 3.           | australiensis.     | 7 a . . e. | occidentalis.    | 12 a . . b. | frontalis?                 |
| 4 a . . e.   | hawaiiensis.       | 8 a . . c. | cursor.          | 13 a . . c. | recta.                     |





Drawn by J. T. Dana.

1 a, d. *Ceratothoa linearis*.  
2 a, c, e. — *crassa*.  
3 a, b, d. *Livoneca longistylis*.  
4 a, b. — *emarginata*.

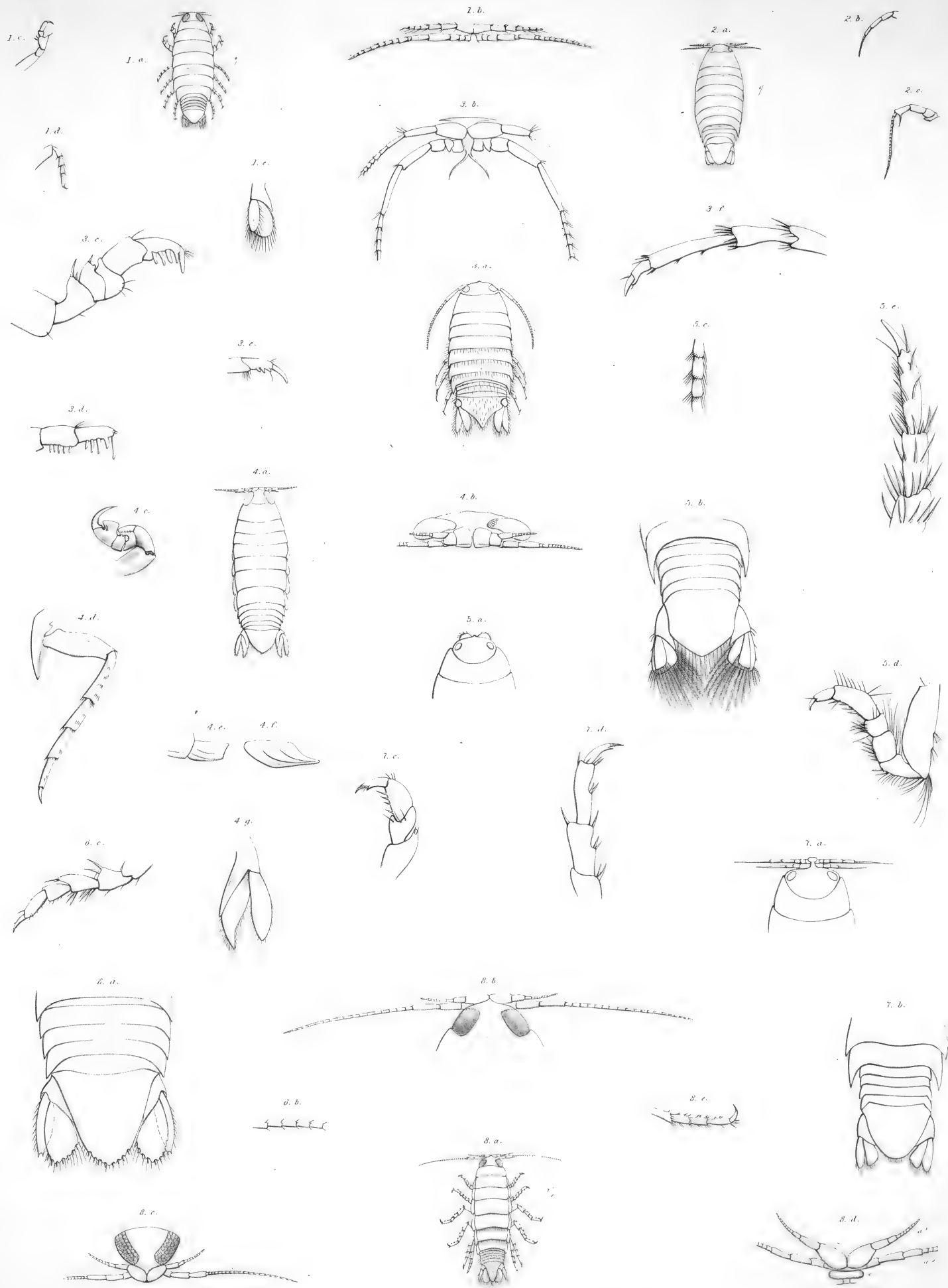
5 a, c, e. *Livoneca lata*.  
6 a, d, e. *Nerocila lata*.  
7 a, b. — *latiuscula*.  
8 a, c, e. — *brasiliensis*.  
9 a, c, e. — *aculeata*.

10 a, d. *Nerocila armata*.  
11 a, c, e. — *tenuipes*.  
12 a, c, e. *Egathoa macrophthalma*.  
13. — *laticeps*.

J. H. M. Schmitt. Sc.



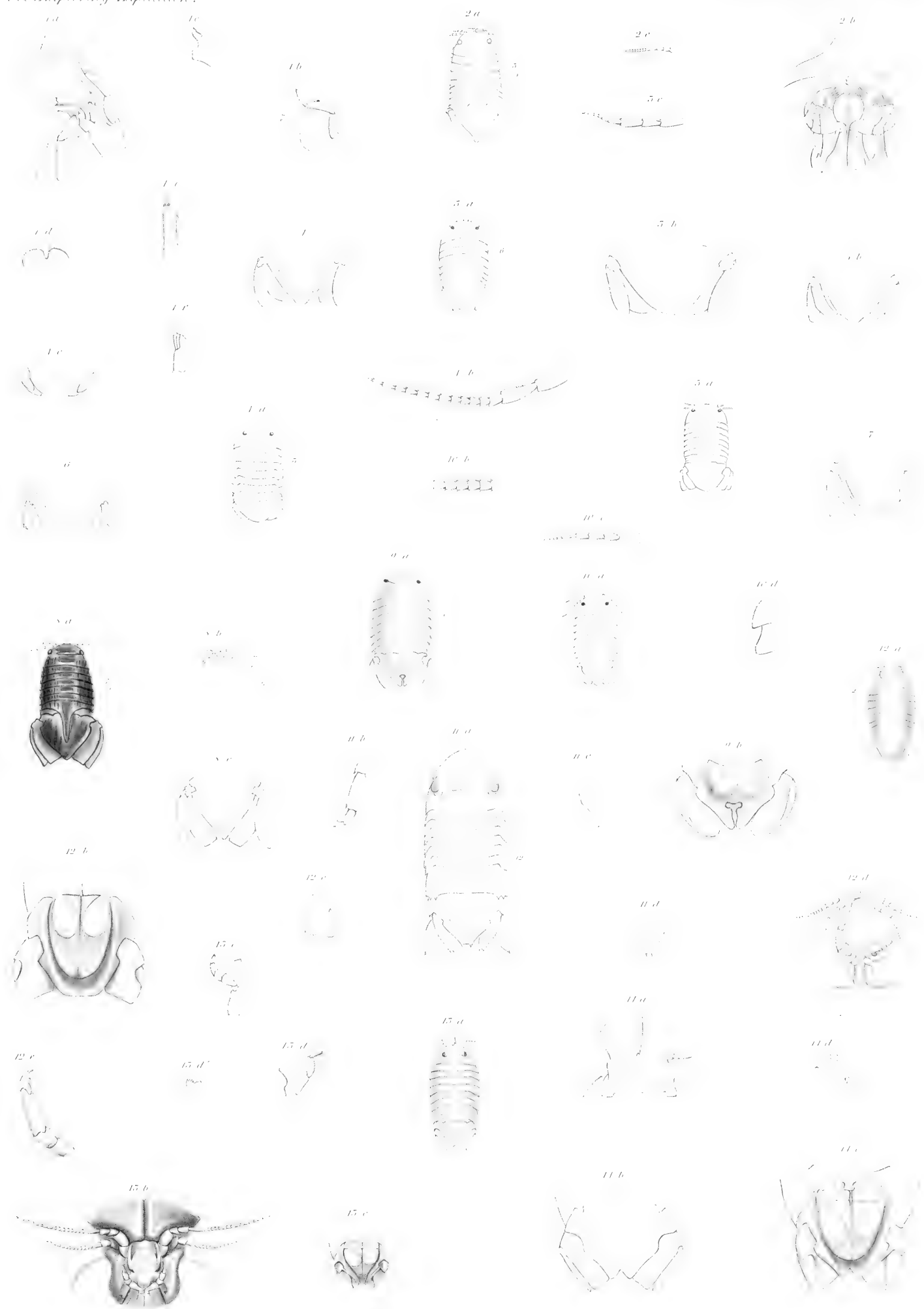




1 a. e. *Aega efferata*.  
 2 a. c. — *novi-zealandiae*.  
 3 a. f. — *multi-digita*.  
 4 a. g. *Pterelas magnificus*.

5 a. e. *Cirolana armata*.  
 6 a. c. — *latistylis*.  
 7 a. d. — *orientalis*.  
 8 a. e. *Corallana hirticauda*.



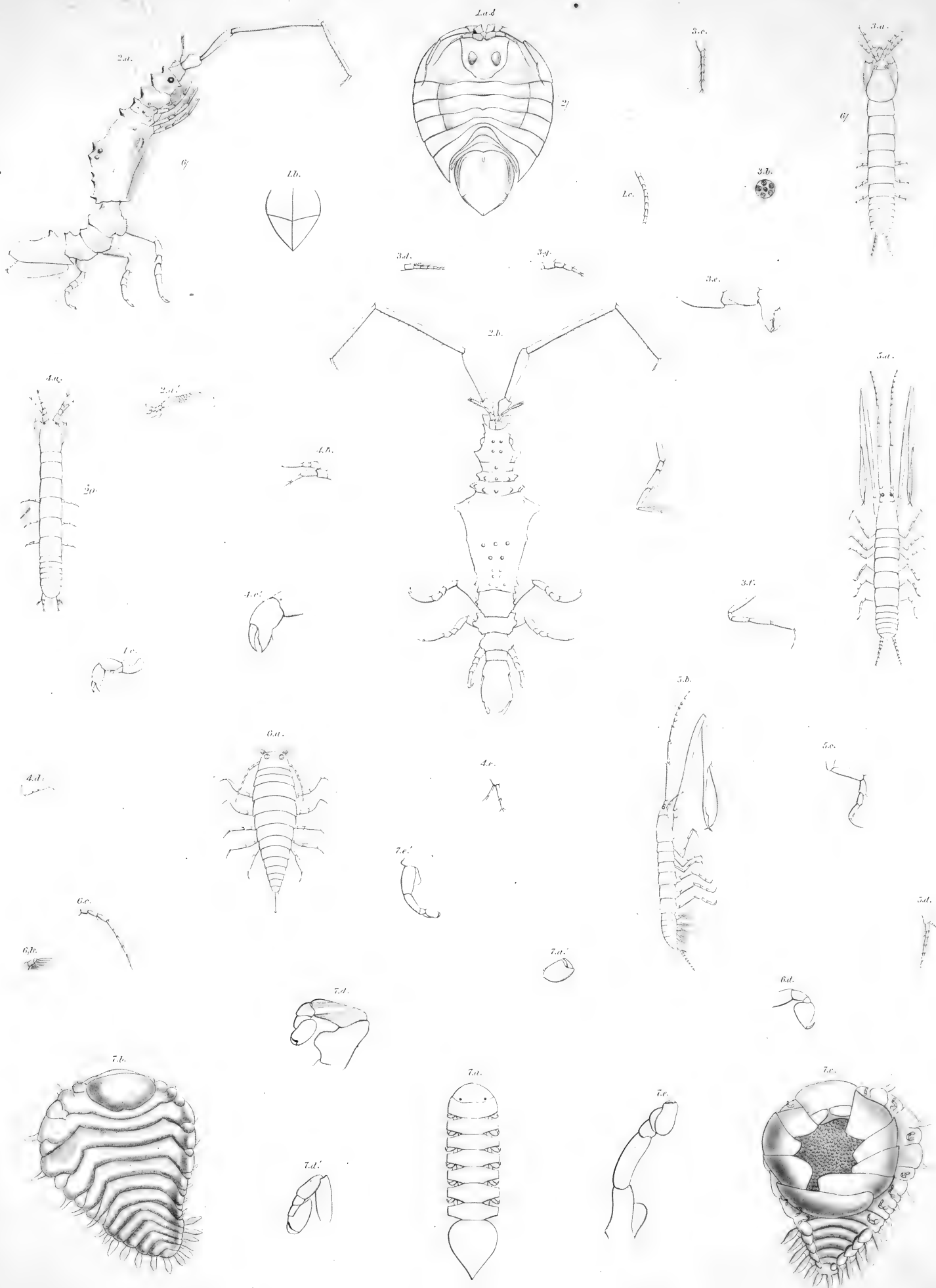


1. *Spheroma* *gigas*  
 1 a . . f var. *lanccolata*  
 2 a . . e *calcareo*  
 3 a . . e *chilensis*  
 4 a . . e *oregonensis*

5 a . b. *Spheroma* *obtusa*  
 6 verrucosa?  
 7 *armata*  
 8 a . c. *spinigera*  
 9 a . b. *globicauda*

10 a . d. *Spheroma* *Savignii*  
 11 a . d. *orientalis*  
 12 a . e. *Cassidina* *latistylis*  
 13 a . e. *Anphoroidea* *typica*  
 14 a . d. *australiensis*





1. a. e. *Serolis planus*.  
2. a. e. *Leachia nodosa*.  
3. a. g. *Tanaid* (*Paratanais*?) *brasiliensis*.

Drawn by J.D. Dana.

7. a. e. *Argeia pugetensis*.

4. a. e. *Paratanais elongatus*.  
5. a. d. *Leptochelia minuta*.  
6. a. d. *Cryptothir minutus*.

W.L. Hoagland Sc.







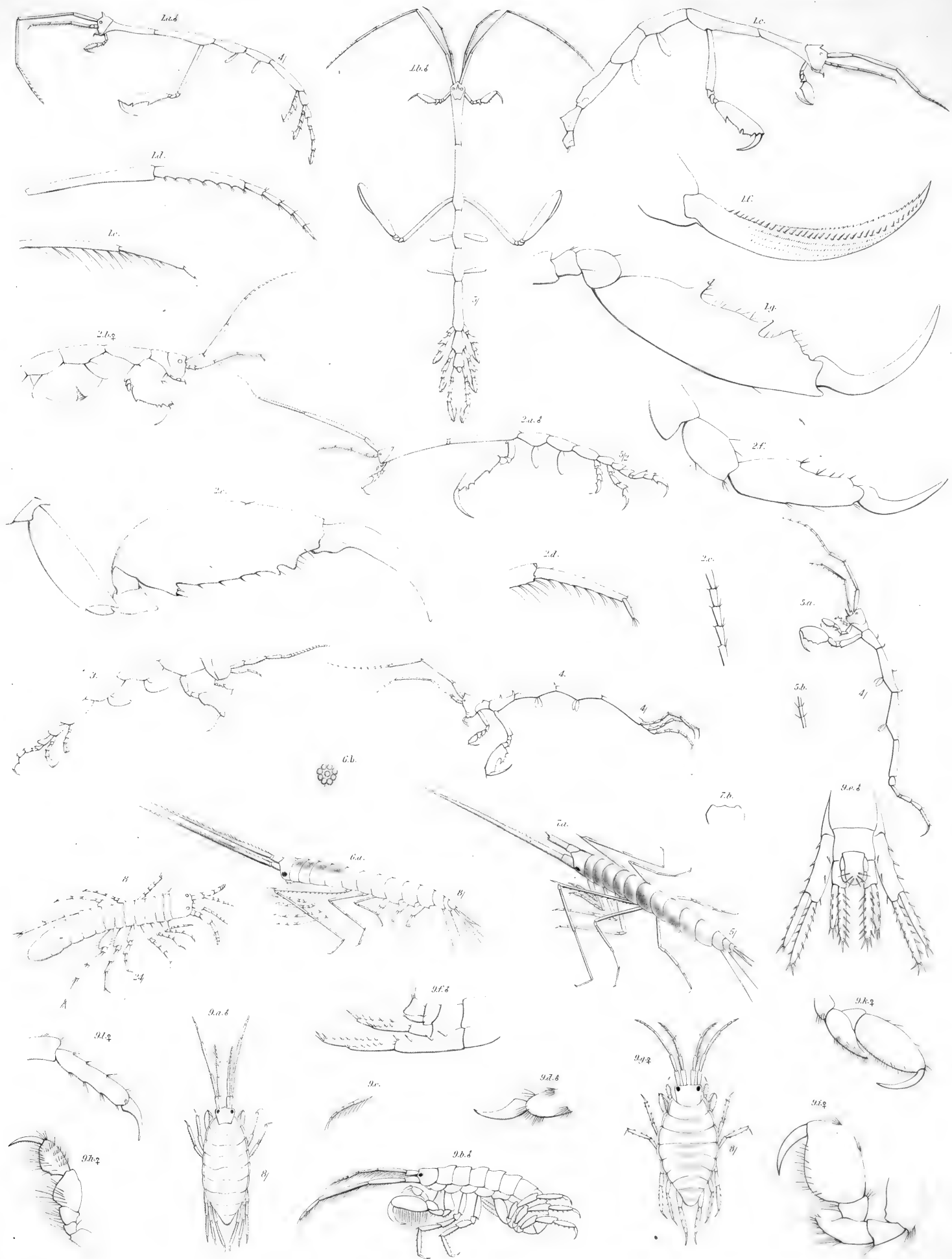
- 1 a...k. *Proto elongatus*.  
 2 a...f. *Protella gracilis*.  
 3 a...e. *Caprella dilatata*.

- 4 a...e. *Caprella robusta*.  
 5 a...g. ——— *compta*.  
 6 ——— *var. obtusirostris*.

Drawn by J.D. Dana.

W.H. Dall, Sc.





1. a. g. *Caprella attenuata*.  
 2. a. f. *Januaria*.  
 3. *globoiceps* (jun.)  
 4. *Eginia? tenella*.

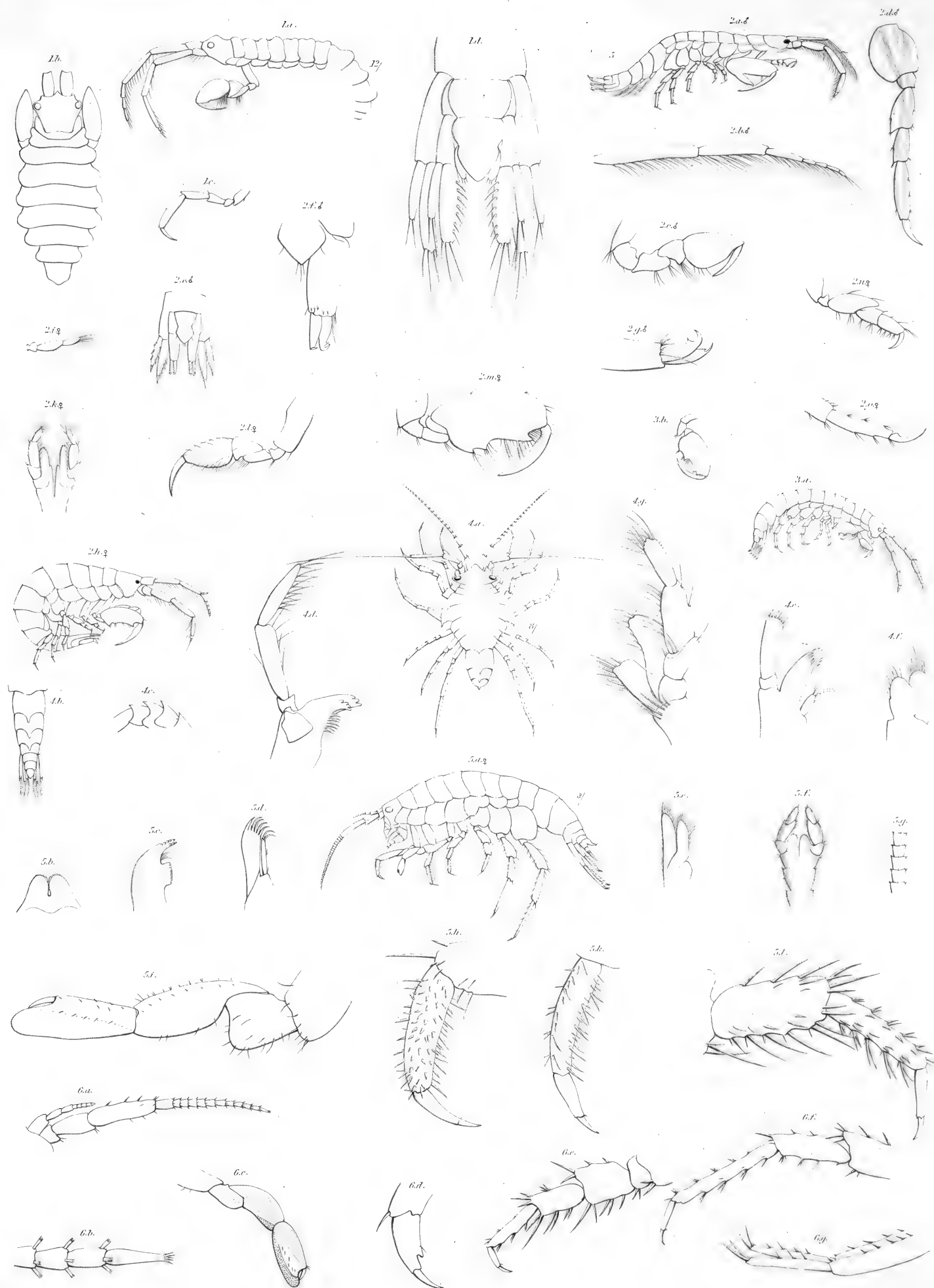
Drawn by J. D. Dana.

9a.1. *Platophium lucasliense*.

5. *Eginia? aculeata*.  
 6. a. b. *Clydonia gracilis*.  
 7. a. b. *longipes*.  
 8. *Corophium? quadriceps*.

W. H. Dall, Sc.





- 1 a...d. *Cyrtophium orientale*.
- 2 a...o. *Cratophium validum*.
- 3 a. b. ——— *orientale*.

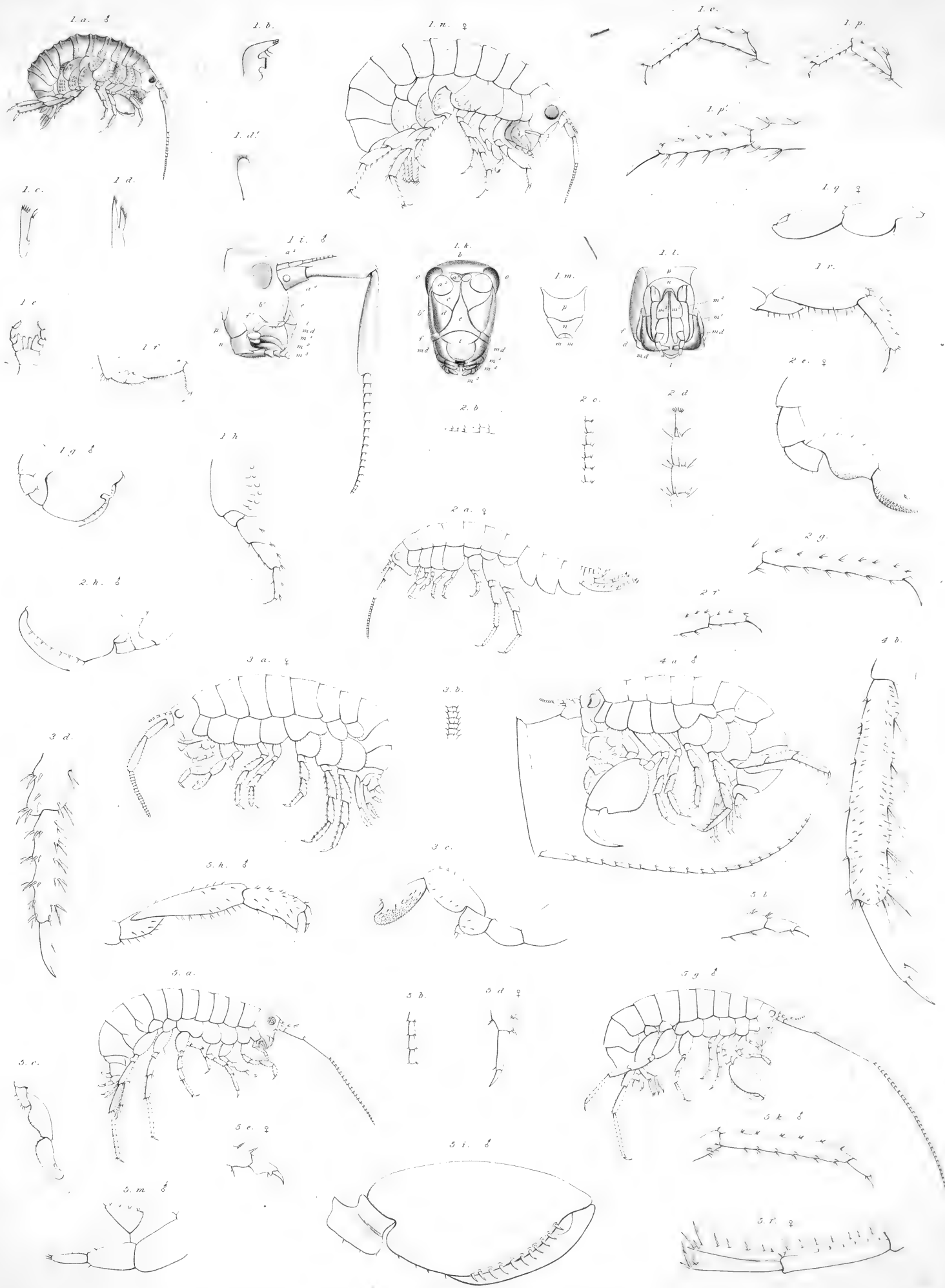
Drawn by J.D. Dana.

- 4 a...g. *Leilius ellipticus*.
- 5 a...l. *Orchestia (Talitrus?) novae-zealandiae*.
- 6 a...g. ——— *(Talitrus?) brevicornis*.

W.H. Dall.





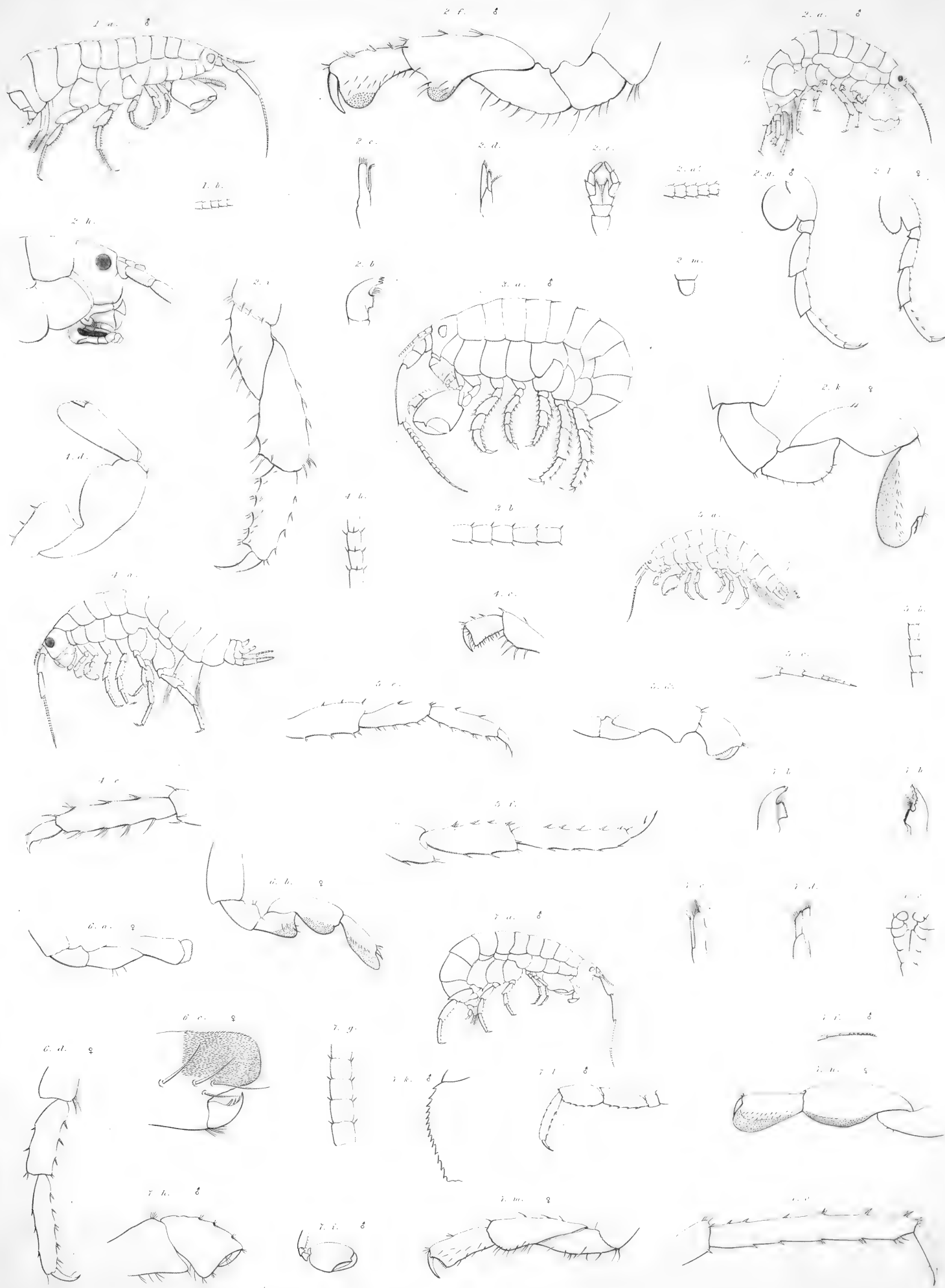


1 a. r. Orchestia (Talitrus) hisculpta.  
 2 a. l. " " brasiliensis.  
 3 a. d. Orchestia (Talitrus) pugettensis.  
 4 a. b. " " ? scabripes.  
 5 a. m. Orchestia (Talorchestia) gracilis.

Drawn by J. D. Dana.

W. H. Dougal. Sc.



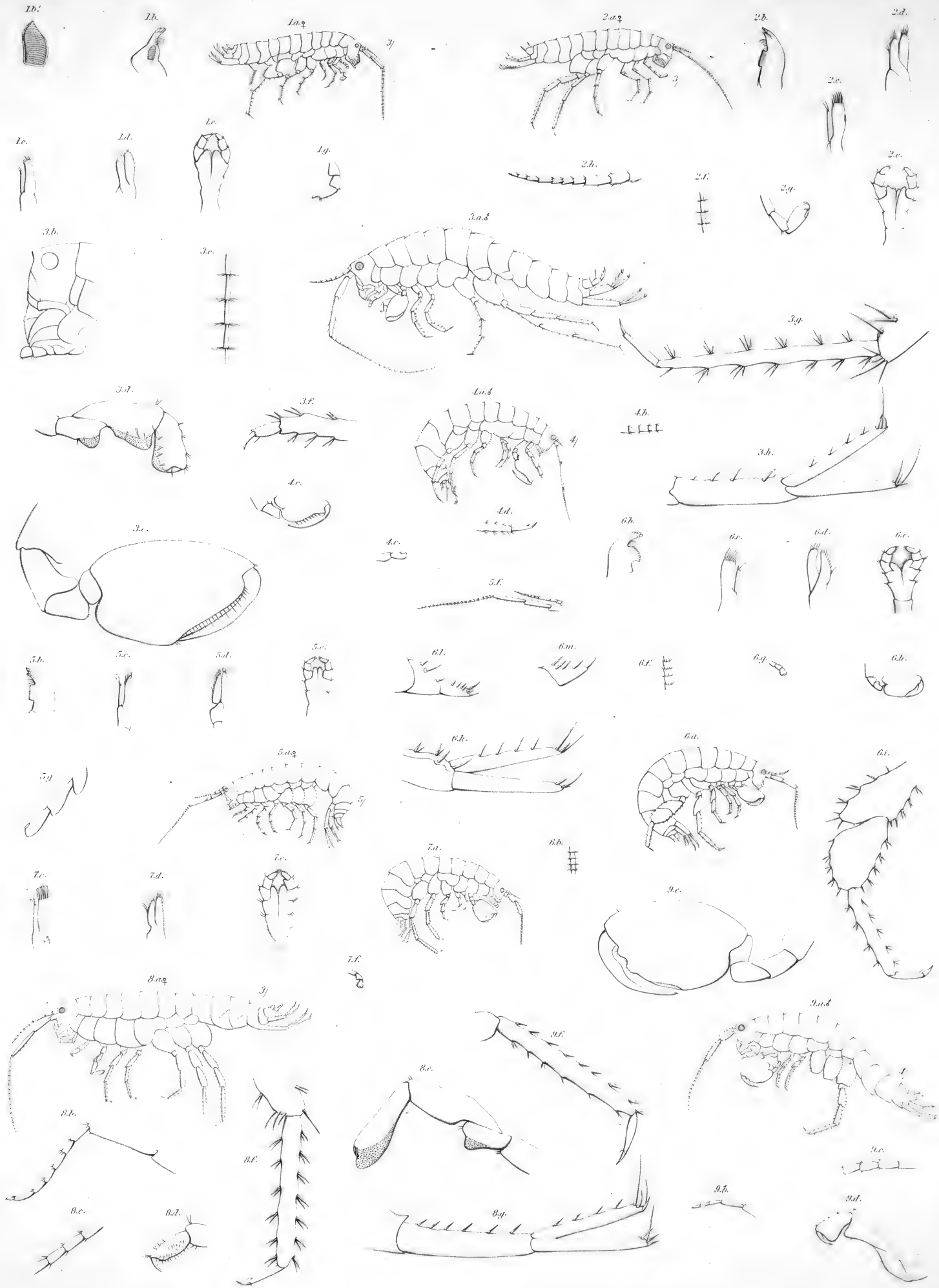


1. a. b. Orchestia Quoyana.  
2. a. m. ——— scutigerula.  
3. a. b. ——— capensis.

4. a. e. Orchestia chilensis.  
5. a. r. ——— nitida; 6. a. d. ?  
7. a. o. ——— serrulata.

Drawn by J.L. Doherty.





1. a. g. *Orchestia tenuis*.  
 2. a. h. " *sylvicola*; 3a. h. (?).  
 4. a. e. " *spinipalpa*.  
 5. a. g. " *tahitensis*.

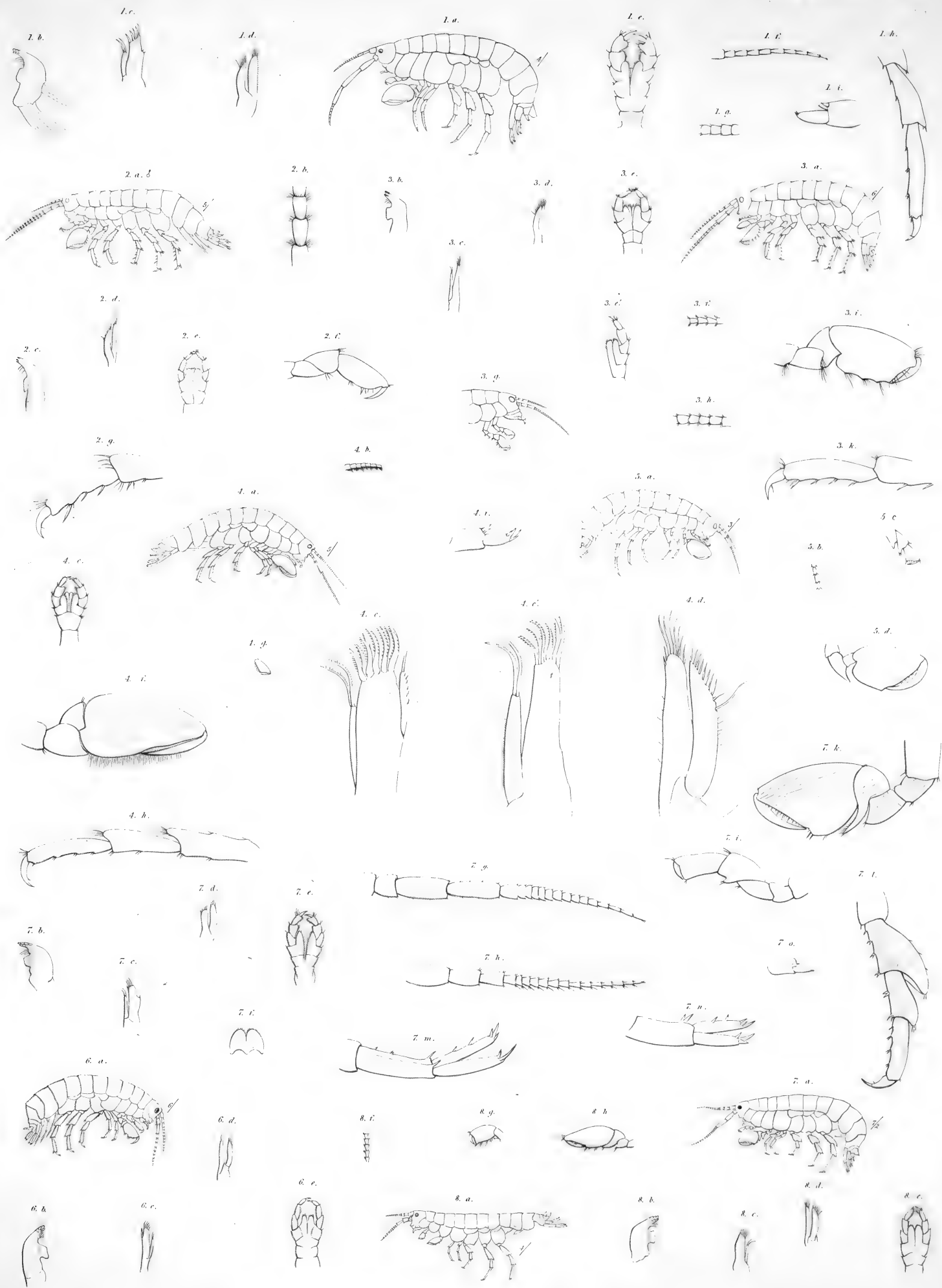
6. a. m. *Orchestia dispar*.  
 7. a. f. " *quadrinana*.  
 8. a. g. " *hawaiiensis*.  
 9. a. f. " *Pickeringii*.

Drawn by J.D. Dana.

W.H. Dall.







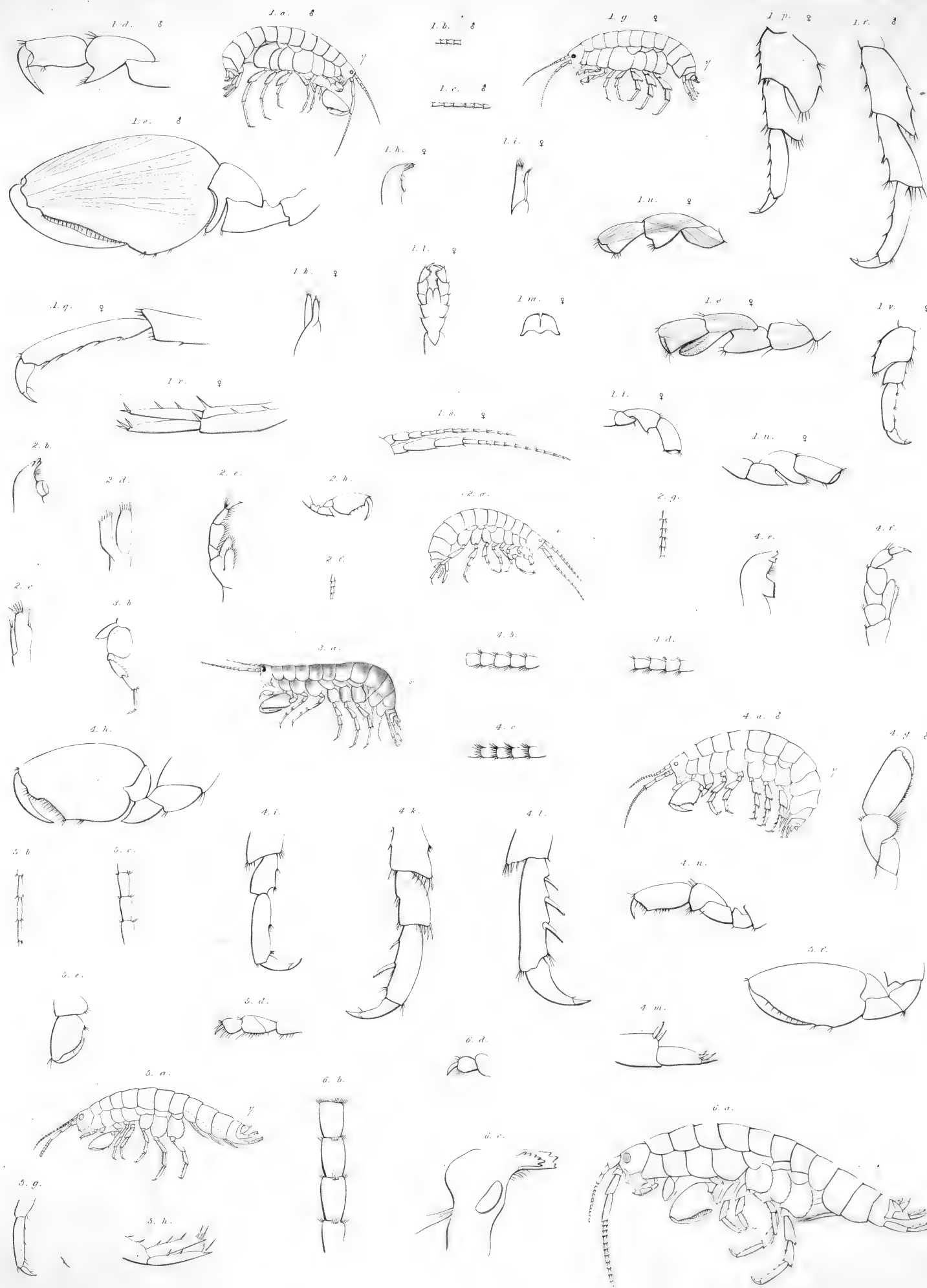
1 a...i. Allorchestes Gaimardii.  
 2 a...g. ———— verticillata.  
 3 a...k. ————  
 4 a...i. ———— hirtipalma.

5 a...d. Allorchestes gracilis.  
 6 a...e. ———— humilis.  
 7 a...o. ———— australis.  
 8 a...h. ———— brevicornis.

Drawn by J. D. Dana.

W. H. Dougal Sc.

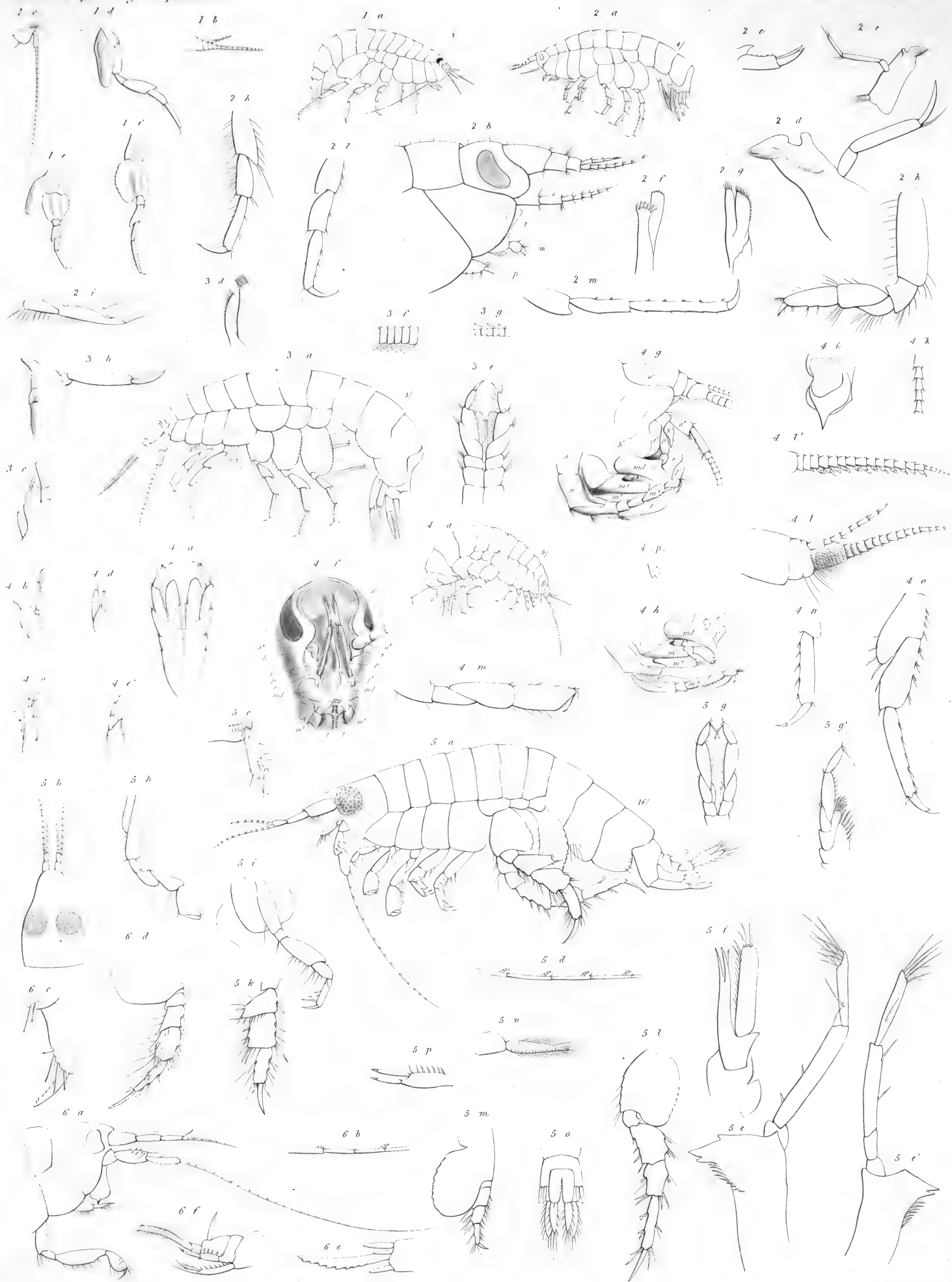




1 a..v. Allorchestes novizealandiae.  
 2 a..h. \_\_\_\_\_ orientalis.  
 3 a..b. \_\_\_\_\_ graminea.

4 a..n. Allorchestes media.  
 5 a..h. \_\_\_\_\_ hawaiiensis.  
 6 a..d. \_\_\_\_\_ pugettensis.



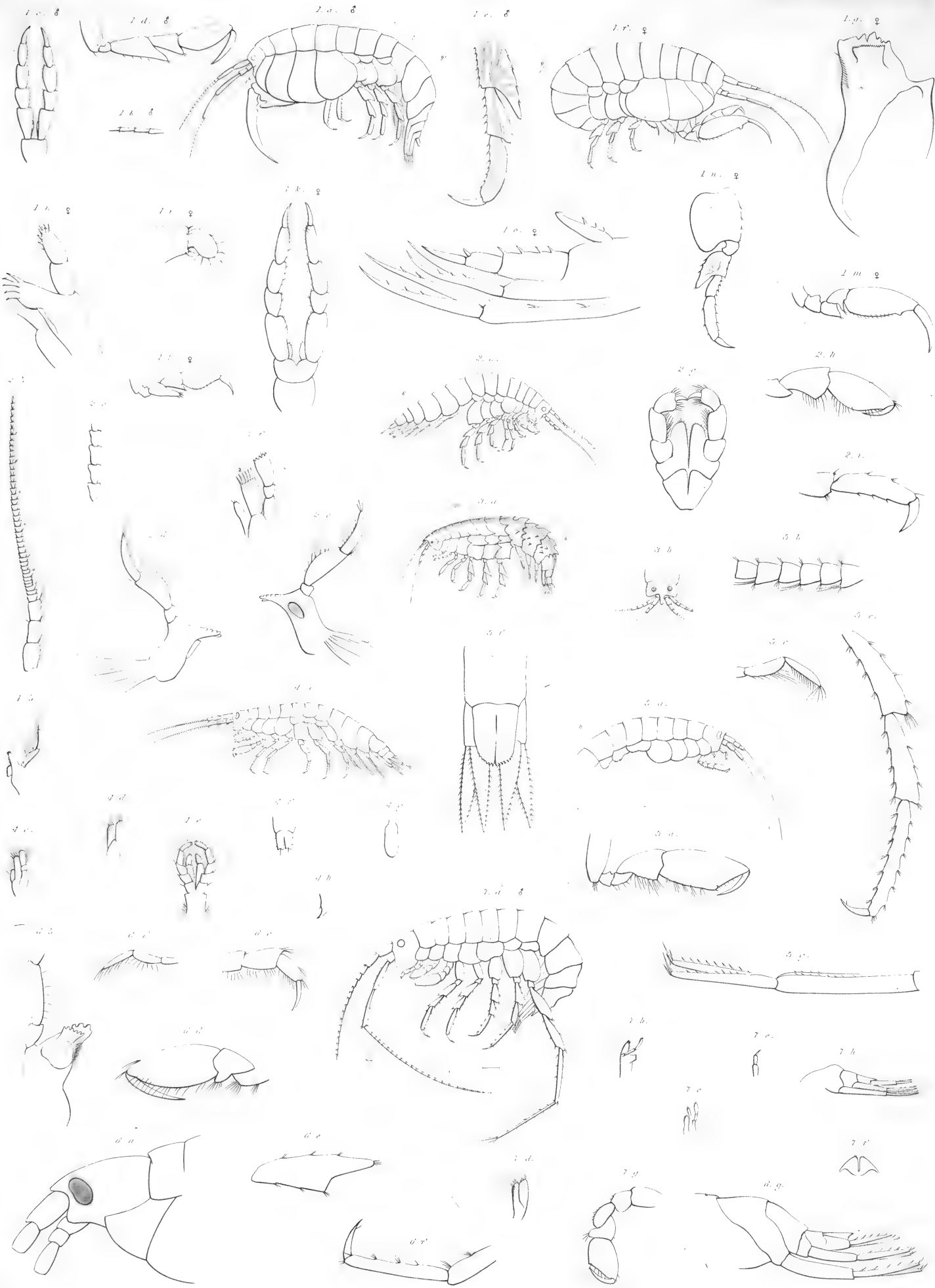


- 1 a. f. *Lysianassa? brasiliensis*  
 2 a. m. *nasuta*  
 3 a. g. *Uristes gigas*

- 4 a. p. *Auonyx fuegiensis*  
 5 a. p. *Urothoe rostratus*  
 6 a. f. *irrostratus*







1 a. o. Stenothoe validus.  
2 a. i. Iphimedia simplex.  
3 a. b. ———— nodosa.

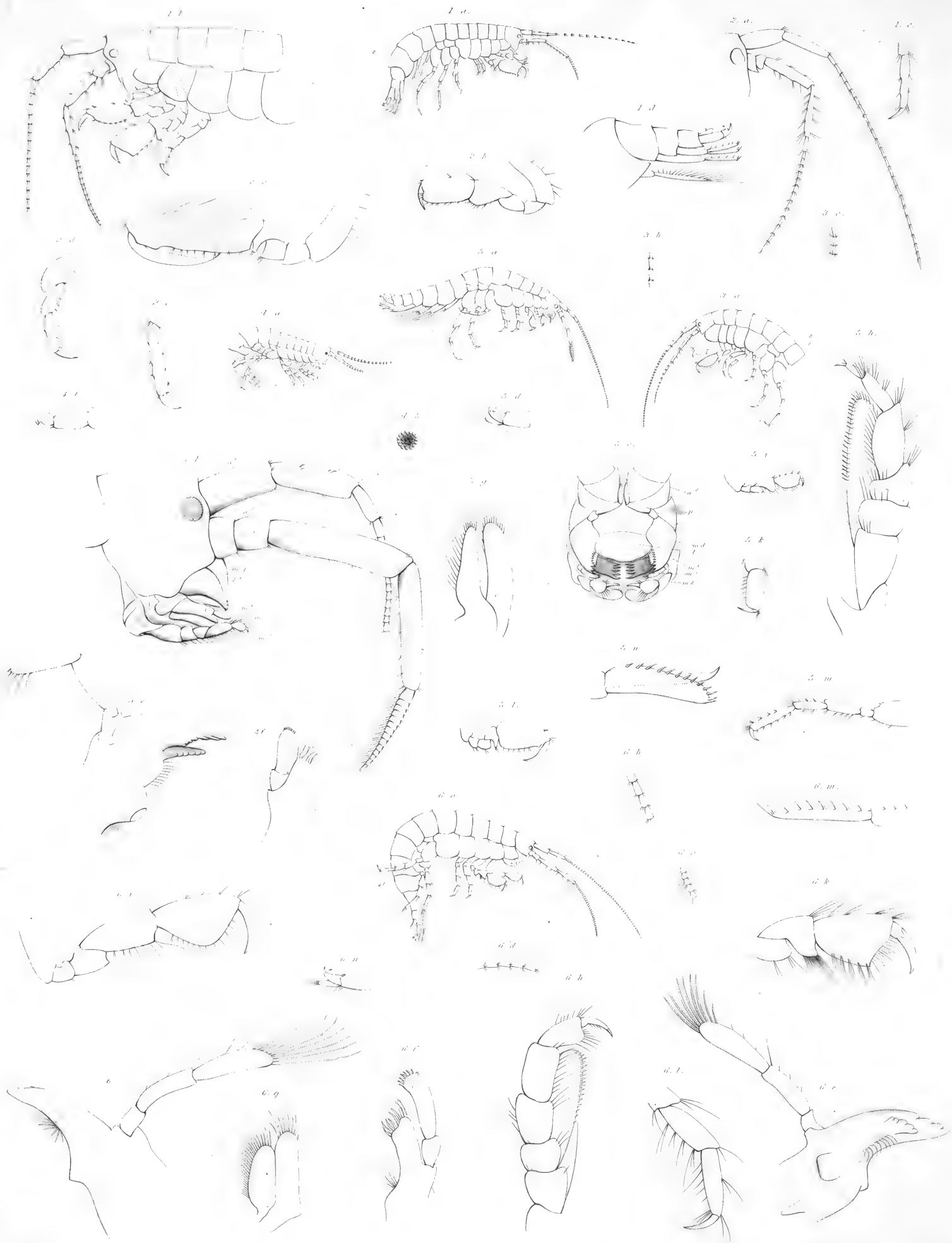
7 a. h. Edicerus novi-zealandia.

4 a. g. Iphimedia fissicauda.  
5 a. g. ———— capensis.  
6 a. g. ———— pugettensis.

Drawn by J.D. Dana.

W.H. Dall. Sc.





1 a, d. Amphithoe rubella.  
2 a, f. ——— orientalis.  
3 a, e. ——— tongensis.

4 a, b. Amphithoe peregrina.  
5 a, n. ——— brevipes.  
6 a, n. ——— brasiliensis.

Drawn by J.B. Dana.

W.H. Dall.





1 a, g. *Amphithoe* *filicornis*.  
 2 a, e. *Gammarus* *asper*.  
 5 a, f. ——— *sulnensis*.

4 a, d. *Gammarus* *albidus*.  
 5 a, c. ——— *tenuis*.  
 6 a, b. ——— *furcicornis*.  
 7 a, e. ——— *tenuellus*.

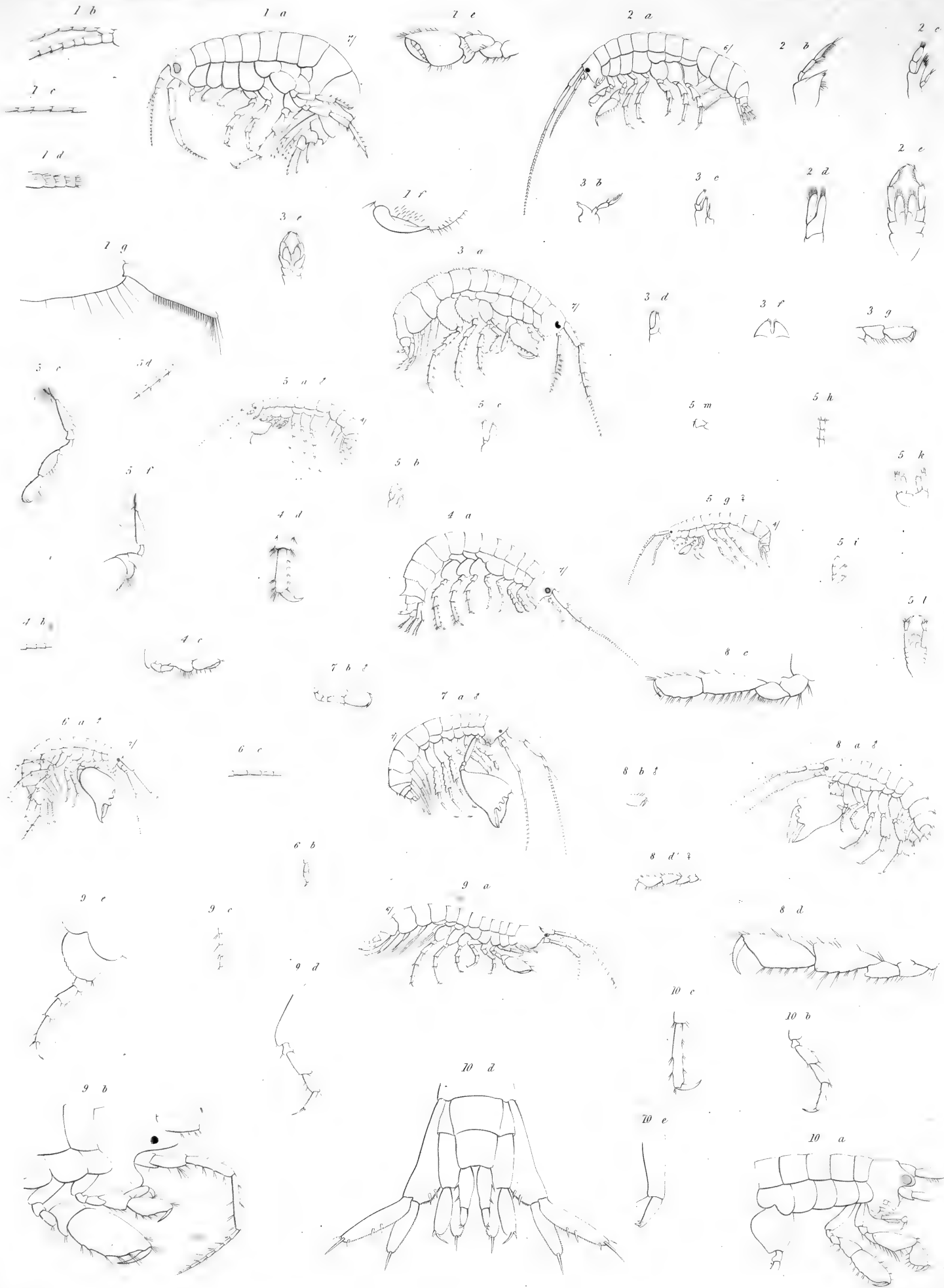
8 a, h. *Gammarus* *fuegiensis*.  
 9 a, g. ——— *quadrimanus*.  
 10 a, e. ——— *brasiliensis*.

Drawn by J. D. Dana.

W. H. Dall, Sc.







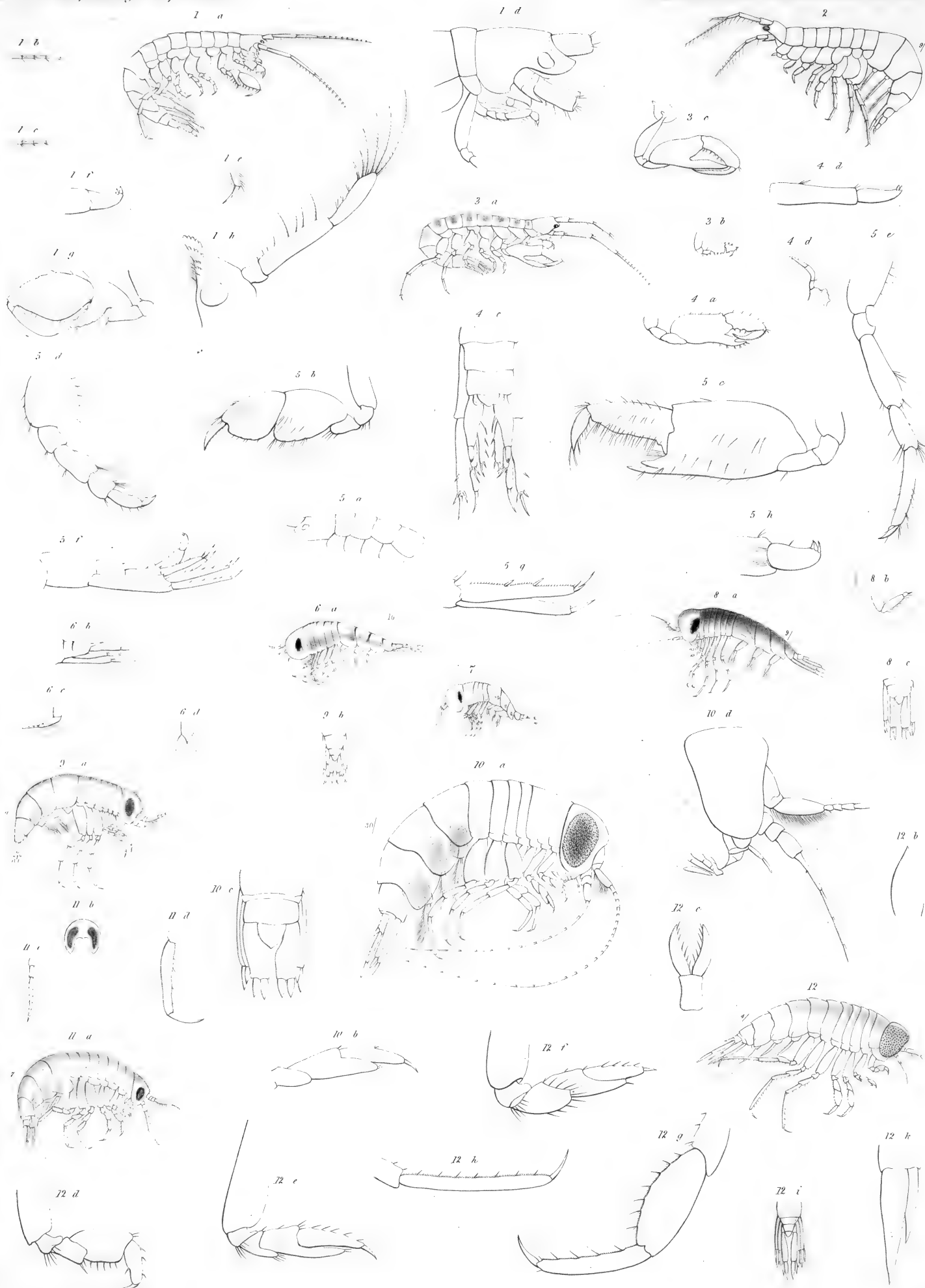
- 1 a. g. *Gammarus pugettensis*  
 2 a. e. . . . . ? *peruvianus*  
 3 a. g. . . . . ? *pubescens*  
 4 a. d. . . . . ? *indicus*  
 5 a. m. *Melita tenuicornis*

- 6 a. c. *Mæra valida*  
 7 a. b. . . . . *setipes*  
 8 a. d. . . . . *anisochir*  
 9 a. e. *Derothoe emissitina*  
 10 a. e. . . . . ? fem.

Drawn by J. D. Dana.

W. H. Dall, Sc.





- 1 a. h. *Dereothoe speculans*  
 2 a. h. *hirsuticornis*  
 3 a. c. *Pyctilus macrodactylus*  
 4 a. d. *pugnax*

- 5 a. h. *Pyctilus brasiliensis*  
 6 a. d. *Lestrigonus ferox*  
 7 a. c. *?* jun  
 8 a. c. *fuscus*

- 9 a. b. *Lestrigonus rubescens*  
 10 a. d. *Fabreni*  
 11 a. d. *Hyperia agilis*  
 12 a. k. *trigona*





- 1 a. g. *Cylopus magellanicus*  
 2 a. e. *Taura macrocephala*  
 3 a. g. *Daira? debilis*  
 4 a. h. — *depressa*  
 5 a. c. — *inaequipes*

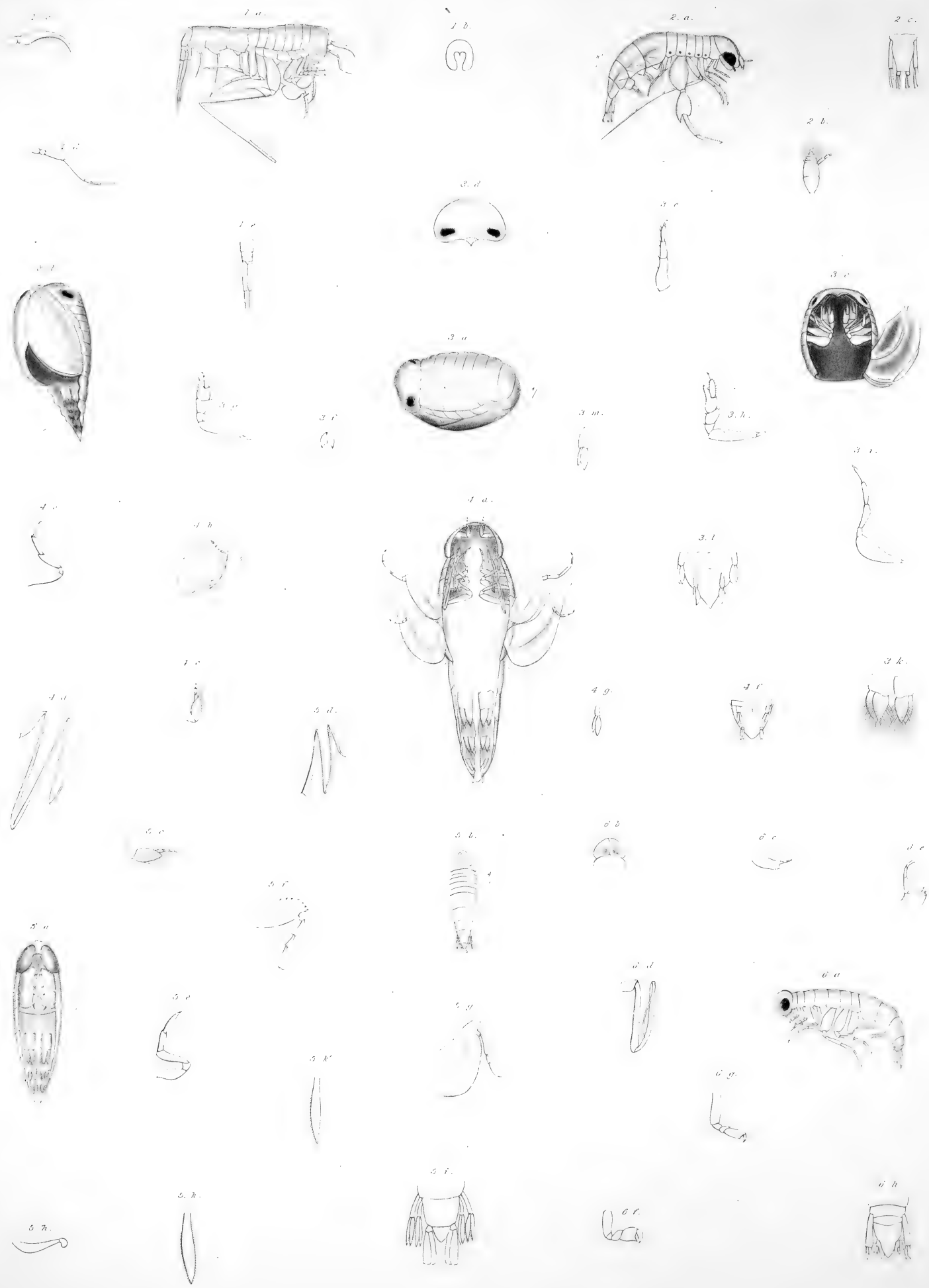
- 6 a. h. *Synopia ultramarina*  
 7 ? male.  
 8 a. d. *angustifrons*  
 9 a. m. *Anchylomera purpurea*  
 10 — *thyropoda*

Drawn by J. D. Dana.

H. H. Dougal, Sc.







1 a..e. Themisto antarctica.  
2 a..c. Phorcus hyalocephalus.  
3 a..m. Dithyrus faba.

4 a..g. Thyropus diaphanus.  
5 a..k. Pronoe brunnea.  
6 a..h. Lycæa ochracea.



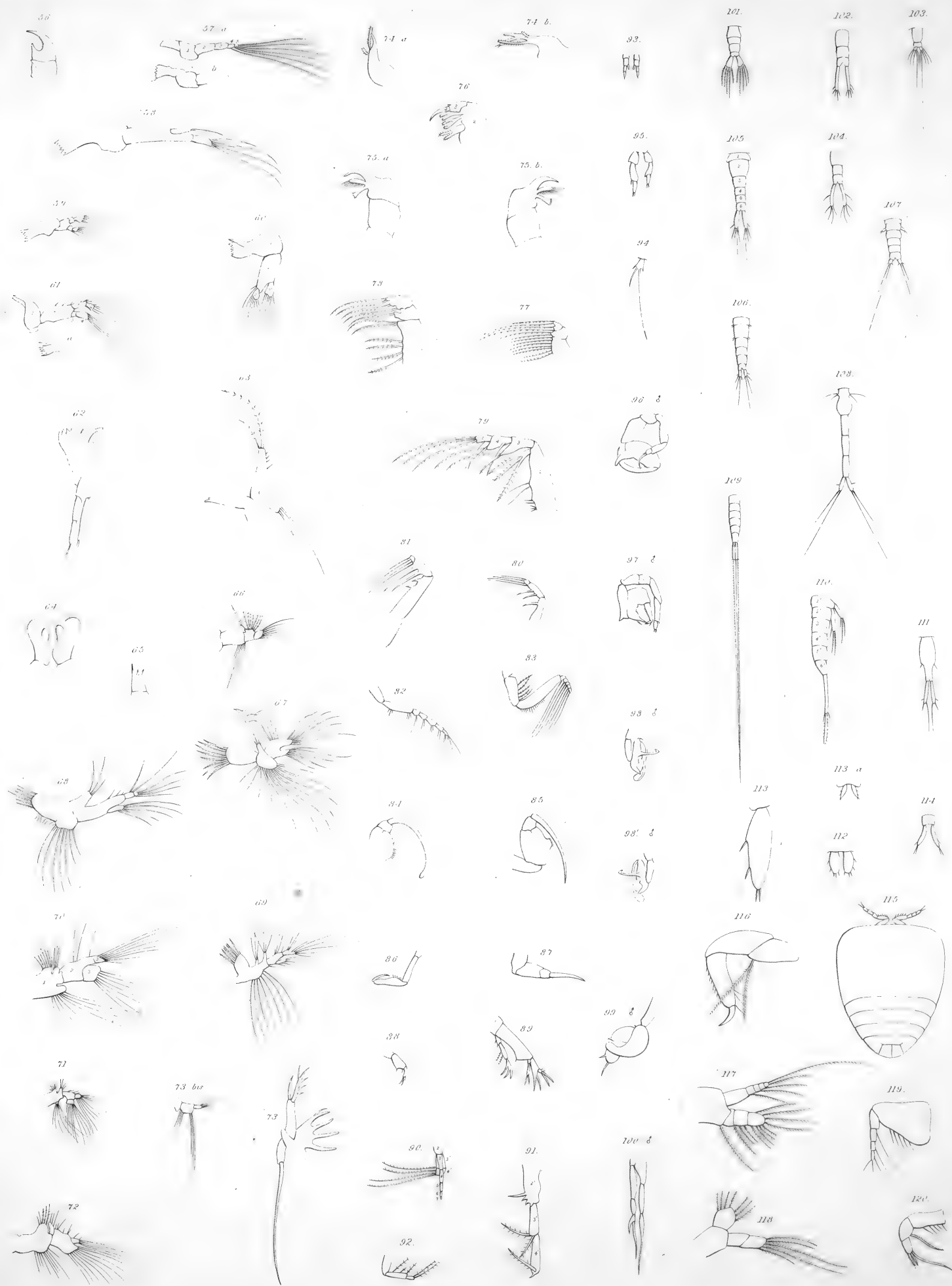


STRUCTURE OF CYCLOPOIDEA: 1-8, body; 9-15, head and eyes; 16-43, anterior antennae; 44-45, posterior antennae.

Drawn by J.D. Dana.

H. D. Dana del.





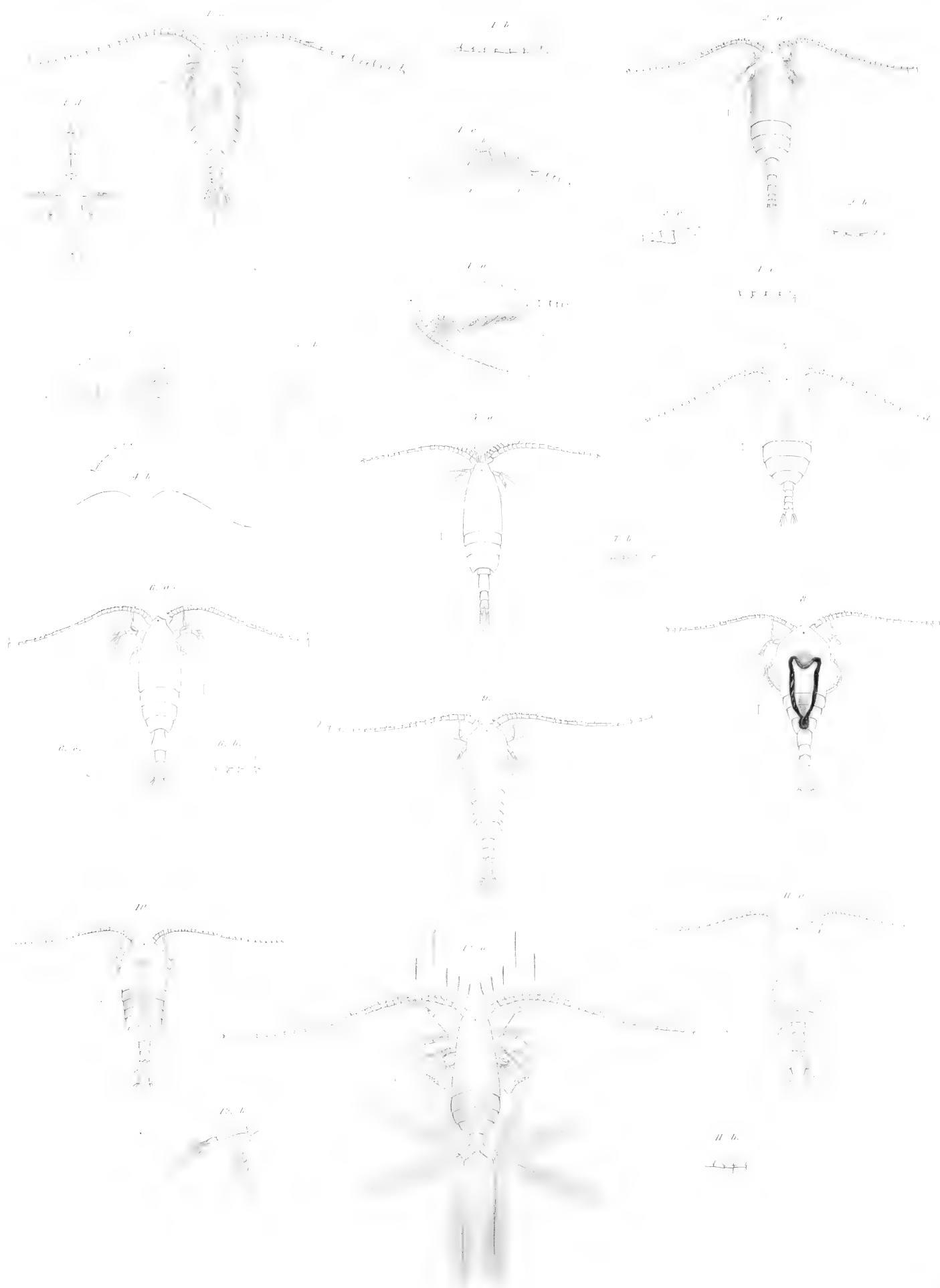
STRUCTURE OF CYCLOPOIDEA: 56-63, mandibles; 64-73, maxillae, one pair;  
74-81, maxillipeds, one pair; 82-92, 1st pair of legs; 93-100, posterior legs;  
101-114, abdomen, and caudal lamellae; 115, Thyone; 117-120, Notodelphys of Allman.

Drawn by J.D. Dana.

Funderston Sc.





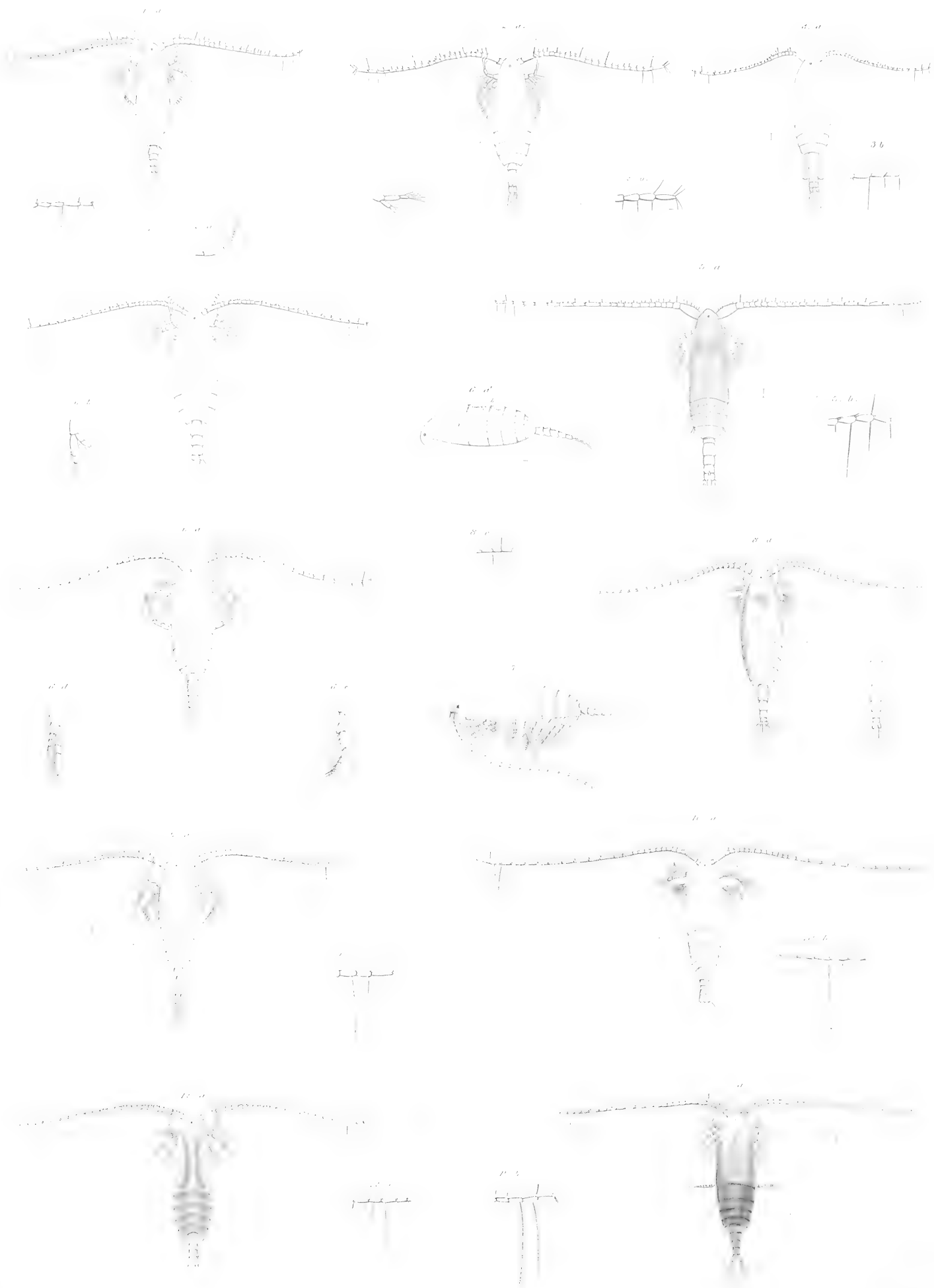


1 a, d. Calanus rotundatus.  
 2 a, c. ——— comptus.  
 3 a, b. ——— nudus.  
 4 a, c. ——— magellanicus.

5 Calanus crassus.  
 6 a, c. ——— furcicaudus.  
 7 a, b. ——— areuicornis.  
 8 ——— turbinatus.

9 Calanus stylifer.  
 10 ——— eurtus.  
 11 a, b. ——— scutellatus.  
 12 a, b. ——— pavo.



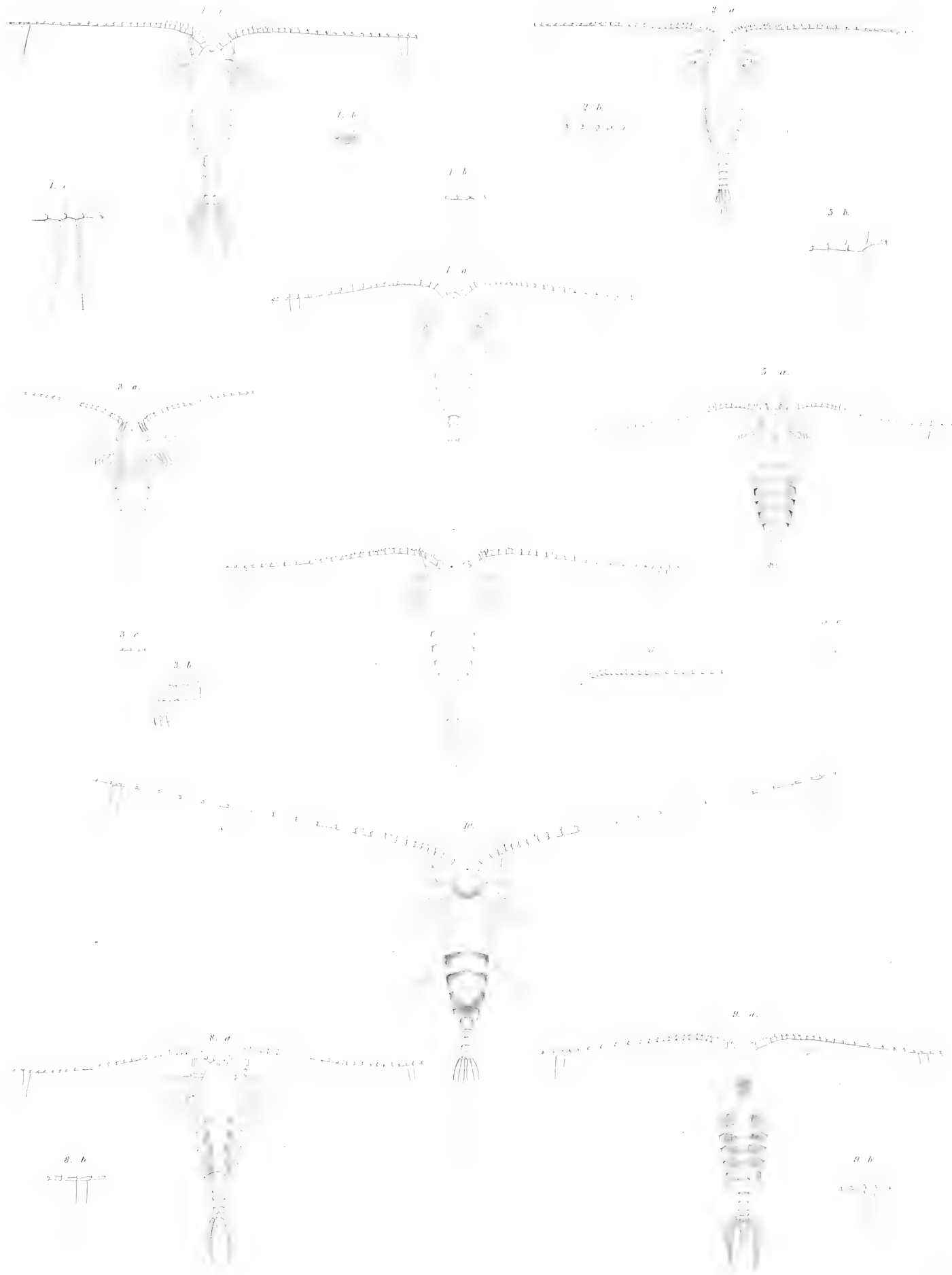


1 a. b. 2 a. b. Calanus levis.  
5 a. b. — — — — — medius.  
4. — — — — — placidus.

5 a. b. Calanus recticornis.  
6 a. d. — — — — — setuligerus.  
7. — — — — — pellucidus.  
8 a. c. — — — — — affinis.

9 a. b. Calanus flaccus.  
10 a. b. — — — — — tenuicornis.  
11 a. b. 12 a. b. — — — — — sanguineus.





1. a. c. Calanus sanguineus?  
 2. a. b. — mundus.  
 3. a. c. — mauritus.  
 4. a. b. — simplicicaudus.

5. a. c. b. Calanus appressus.  
 6. — — — communis.  
 7. a. b. — amicus.  
 8. a. b. — bellus.

10. Calanus gracilis.

Drawn by J. D. Dana.

H. H. Bengel Sc.





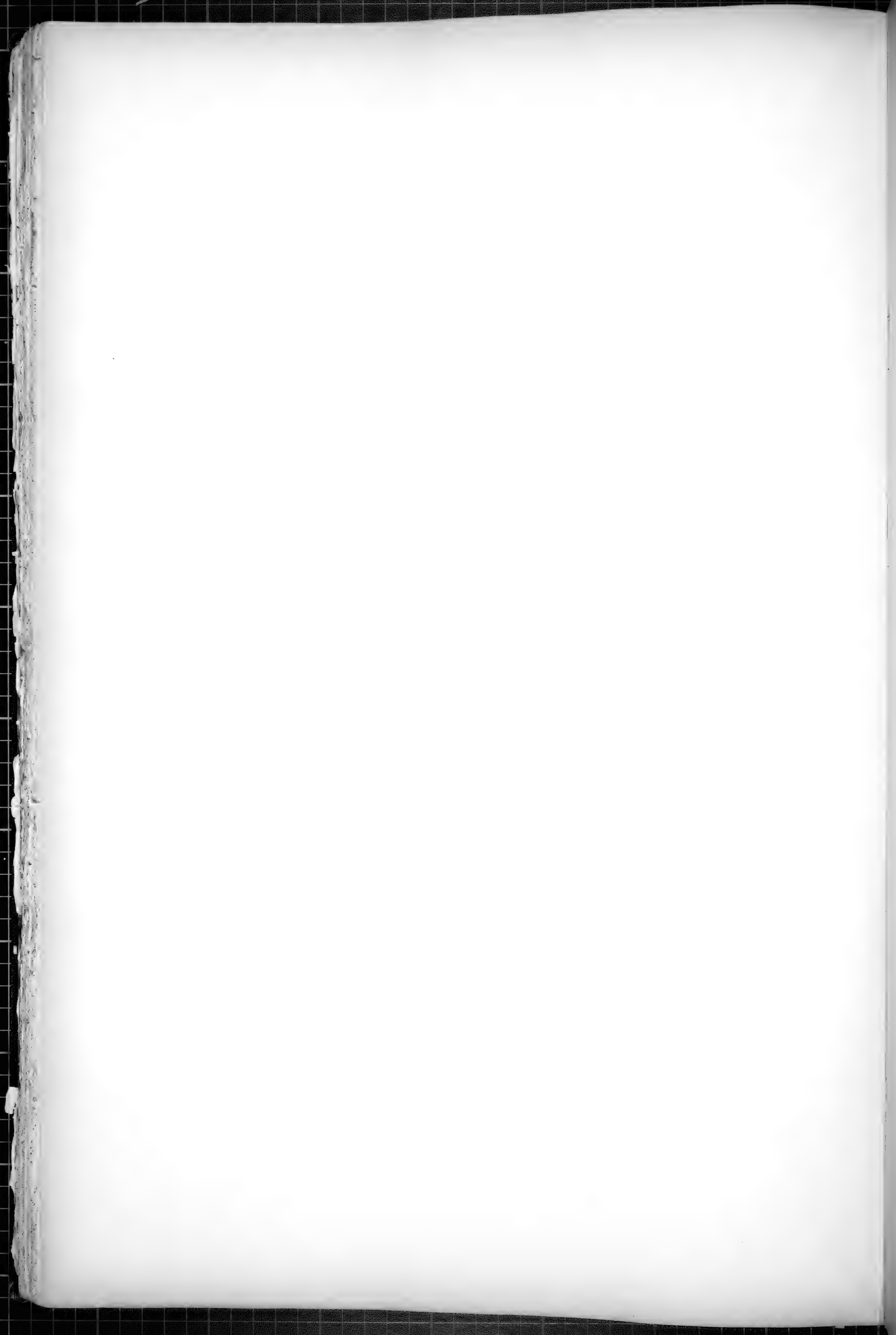


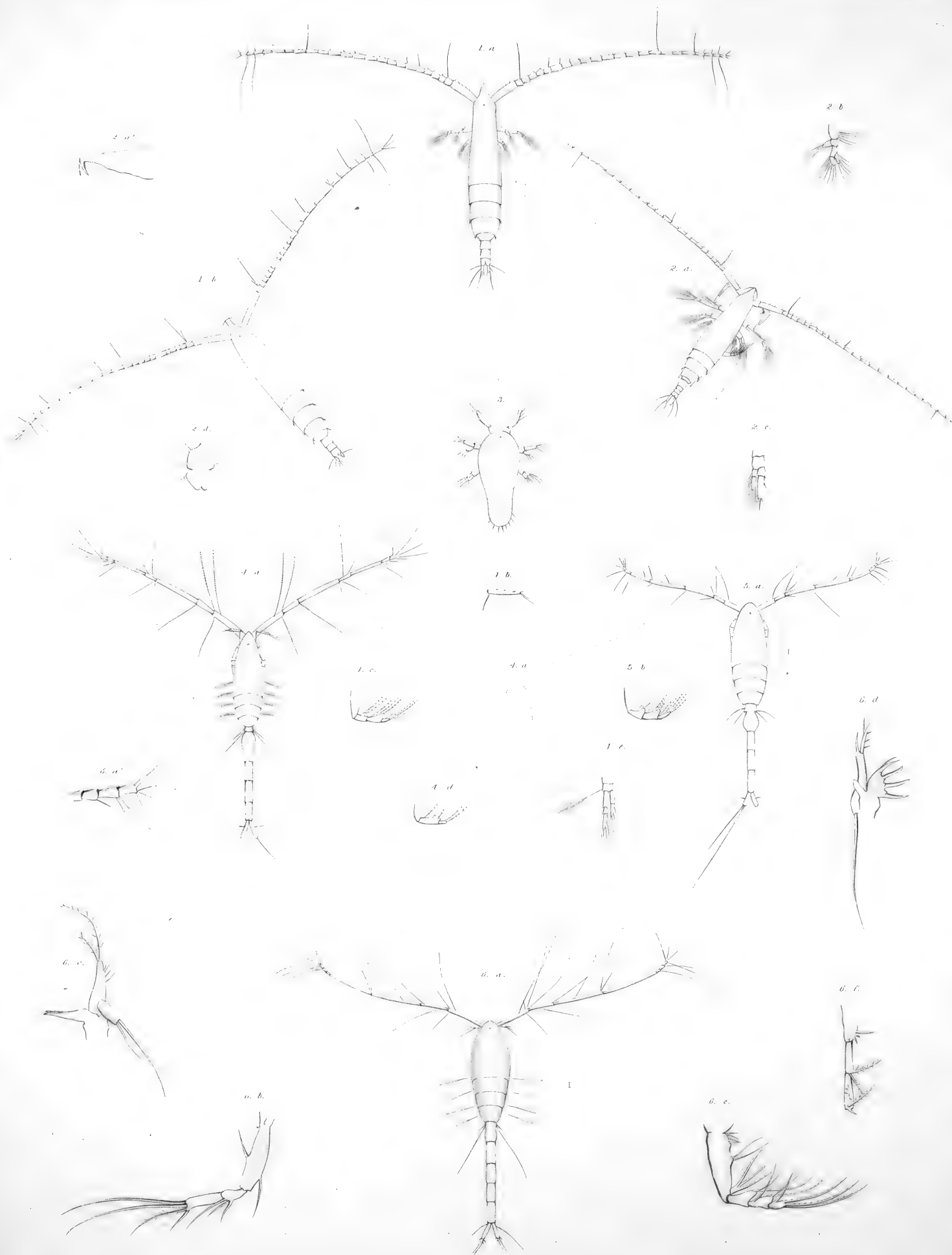
1. a. n. Calanus elongatus.

2. a. d. Calanus attenuatus.

Drawn by J. D. Dana.

W. H. Dall.



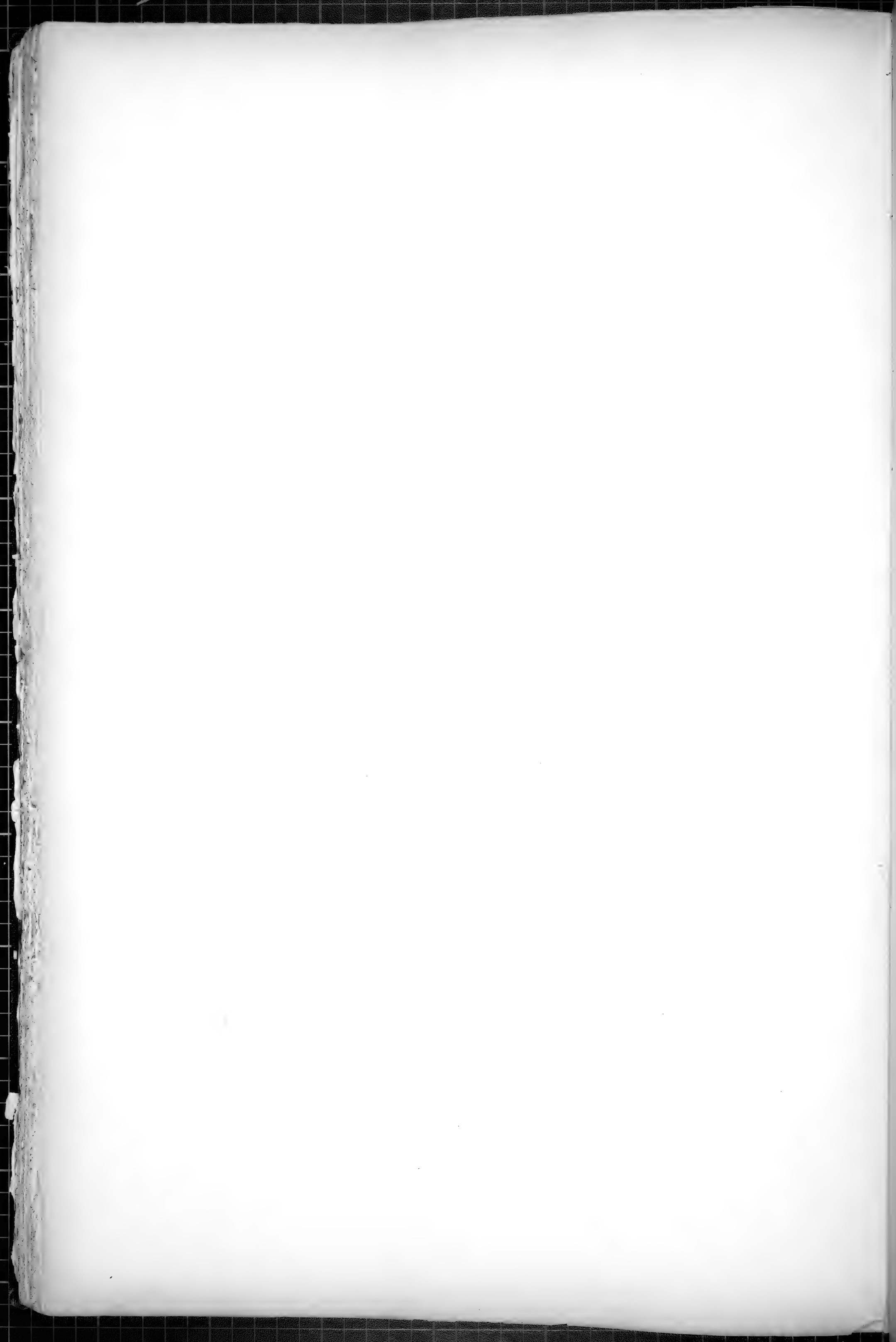


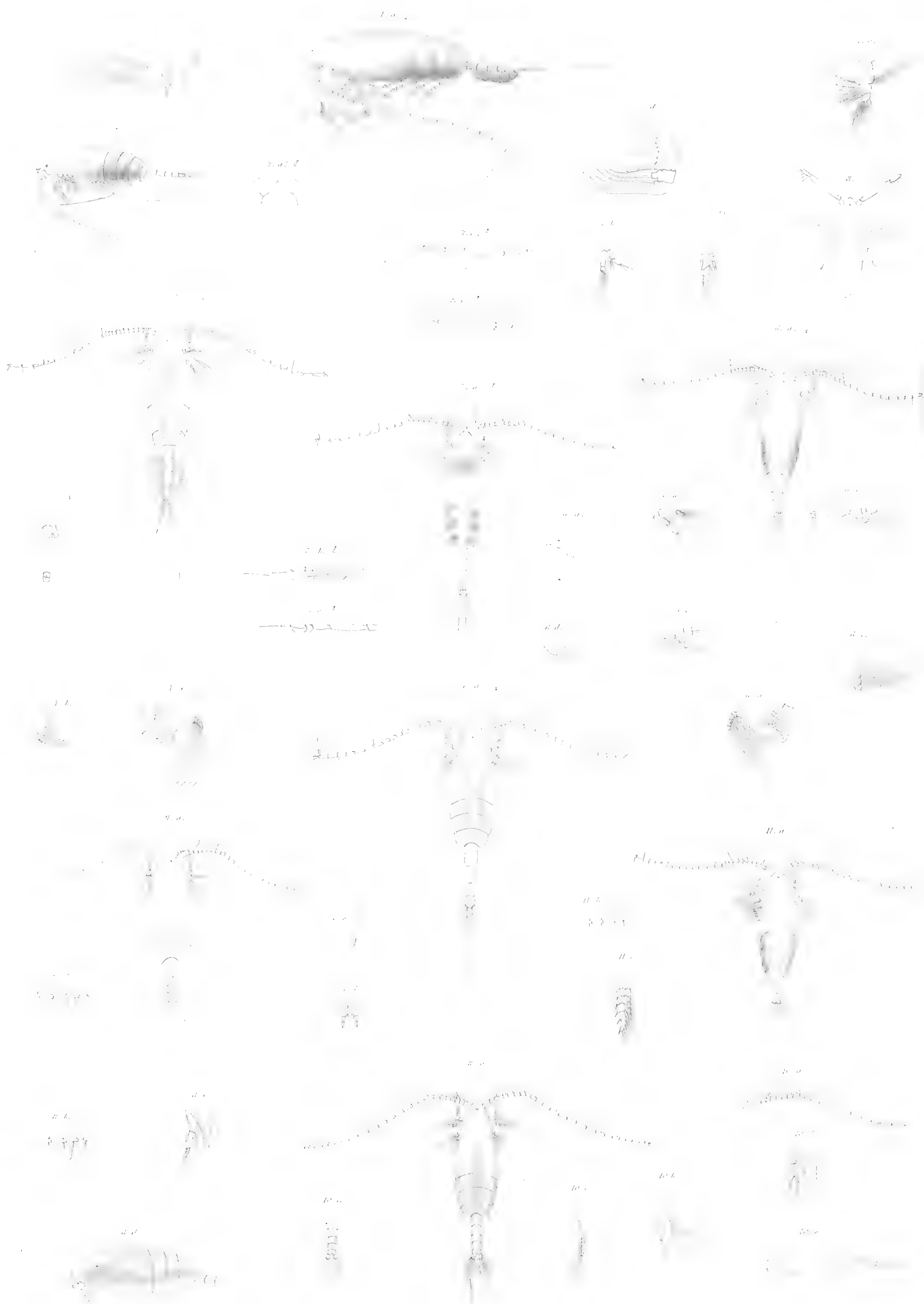
1 a. b. *Rhinocalanus rostrifrons*.  
 2 a. d. ————— *cornutus*.  
 3. *Calanus jun.*

4 a. c. e. *Oithona plumifera*.  
 5 a. b. ————— *abbreviata*.  
 6 a. f. ————— *setiger*.

Drawn by J.D. Dana.

W.H. Douglas Sc.



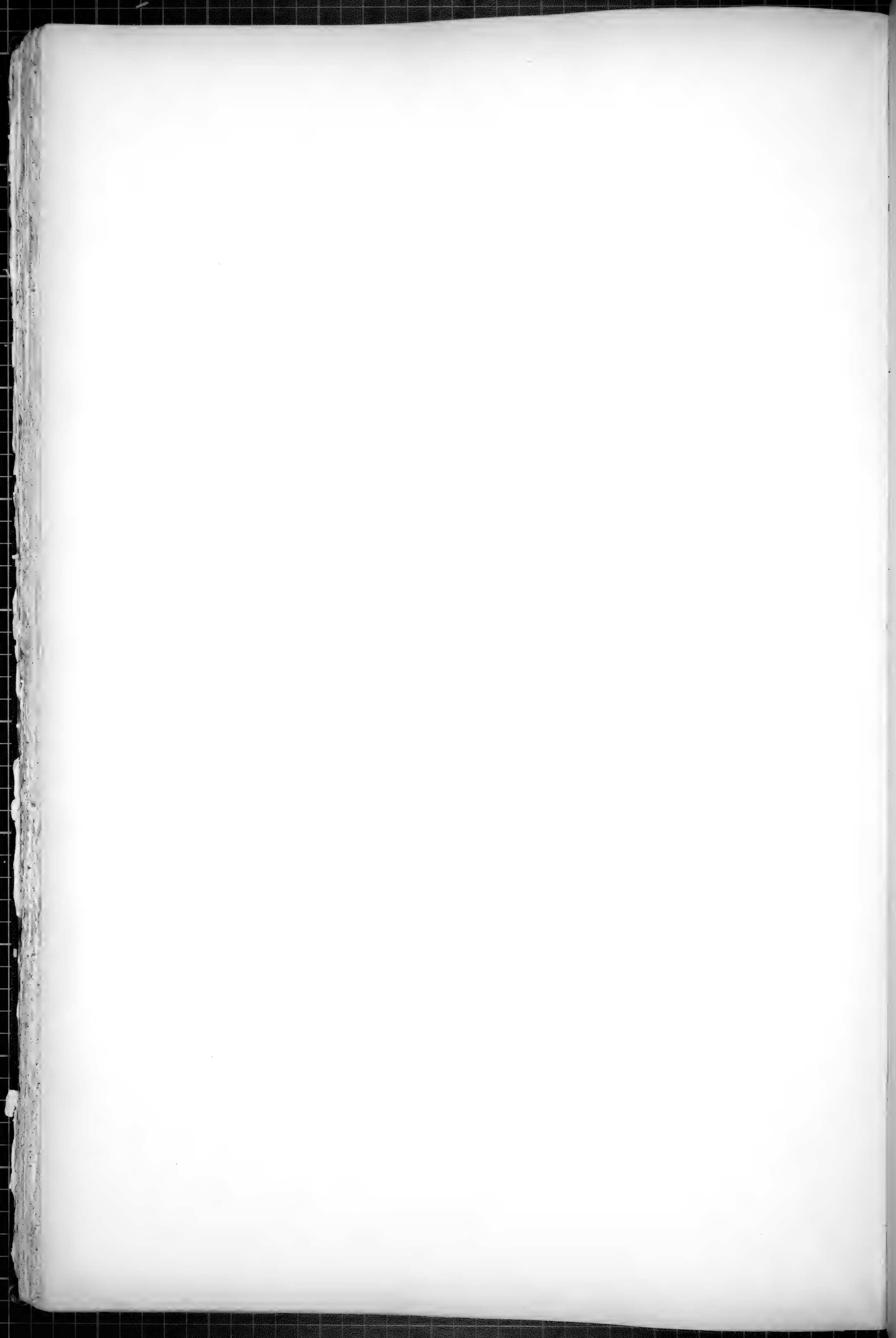


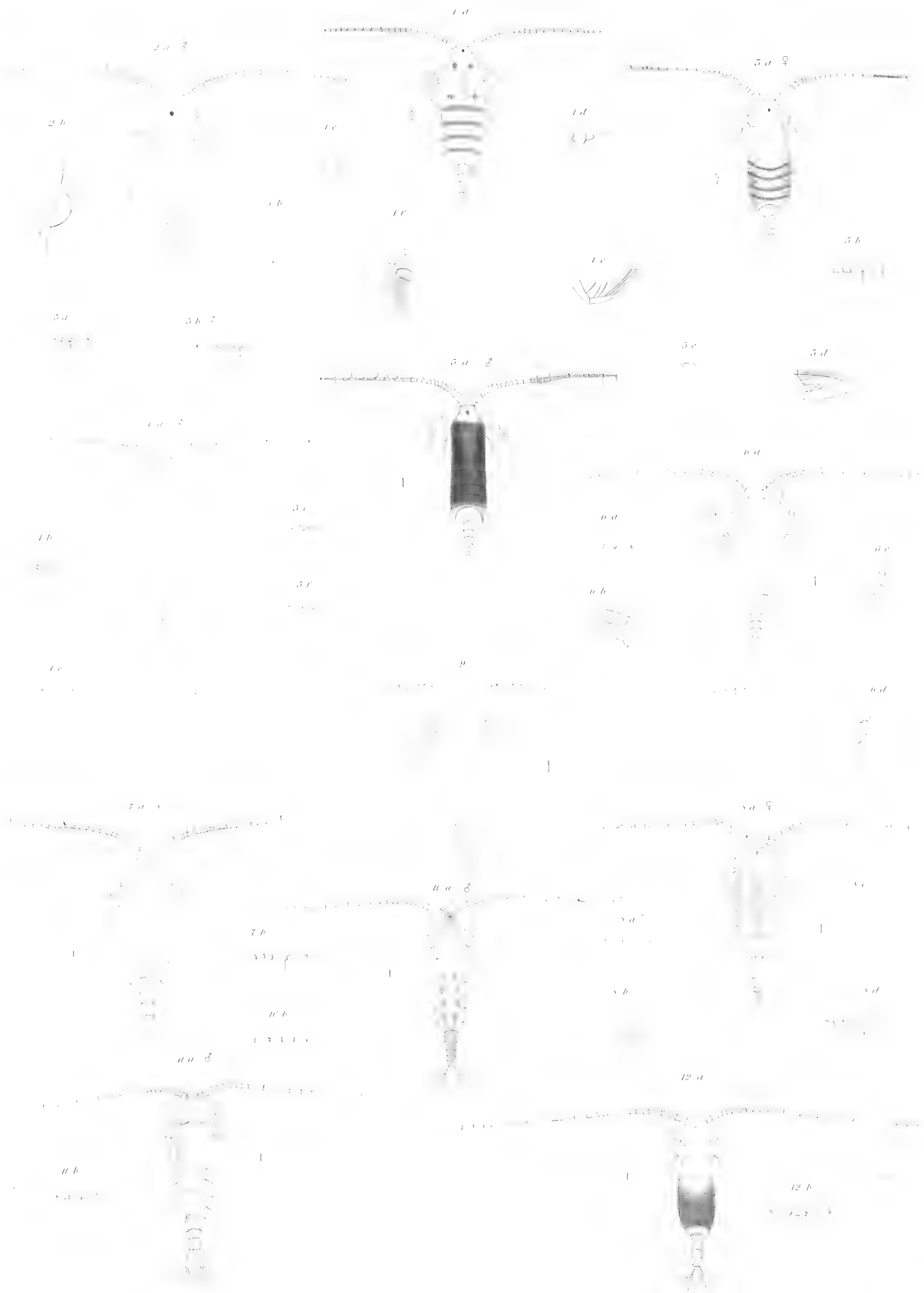
1 a. d. 2 a. e. Euchaeta communis.  
3 Euchaeta communis, juv. ?  
4 a. b. 5 a. e. concinna.  
6 a. g. pubescens.

7 a. e. Euchaeta diadema.  
8 a. d. Undina vulgaris.  
9 a. b. simplex.  
10 a. f. ?

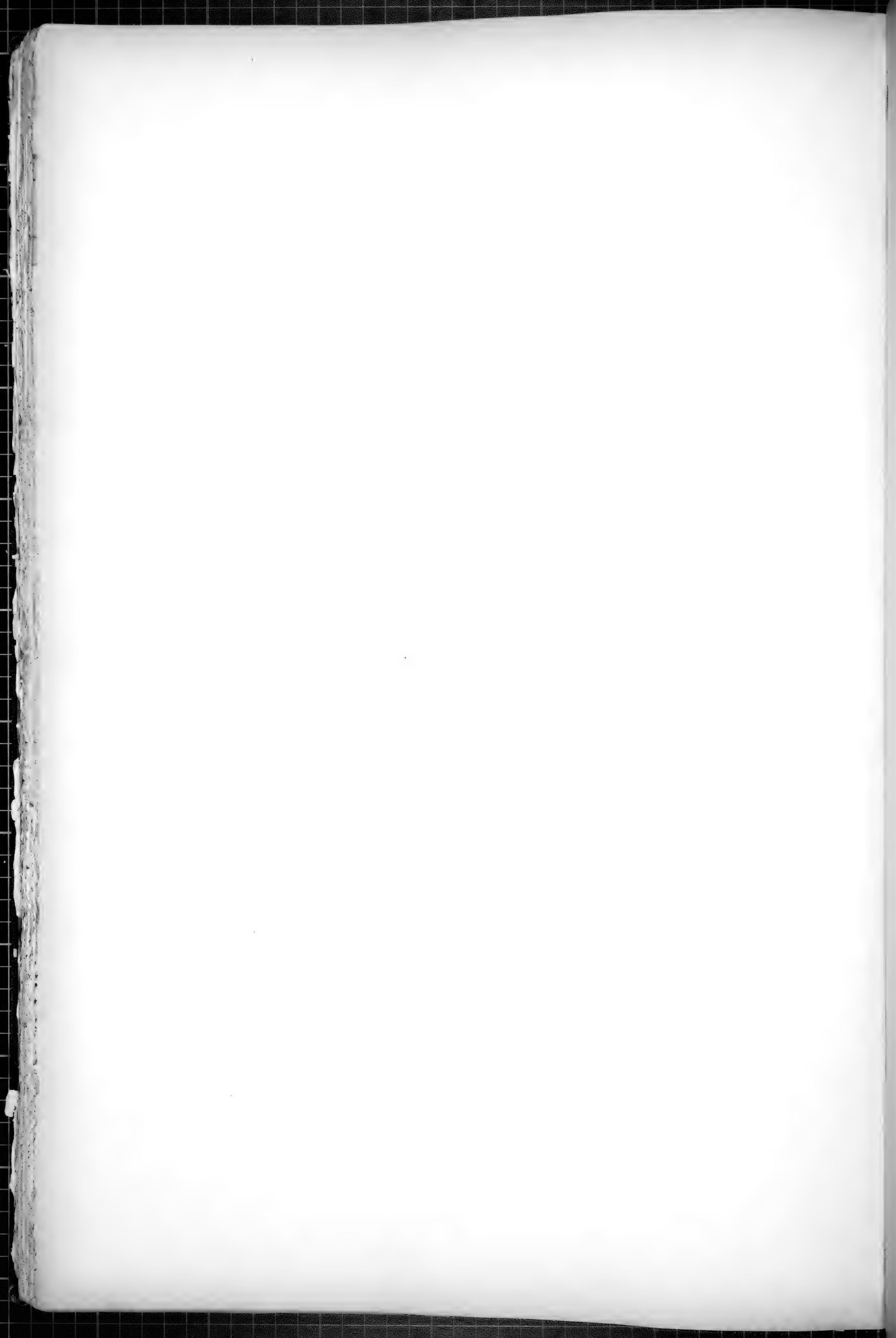
11 a. e. Undina inornata.

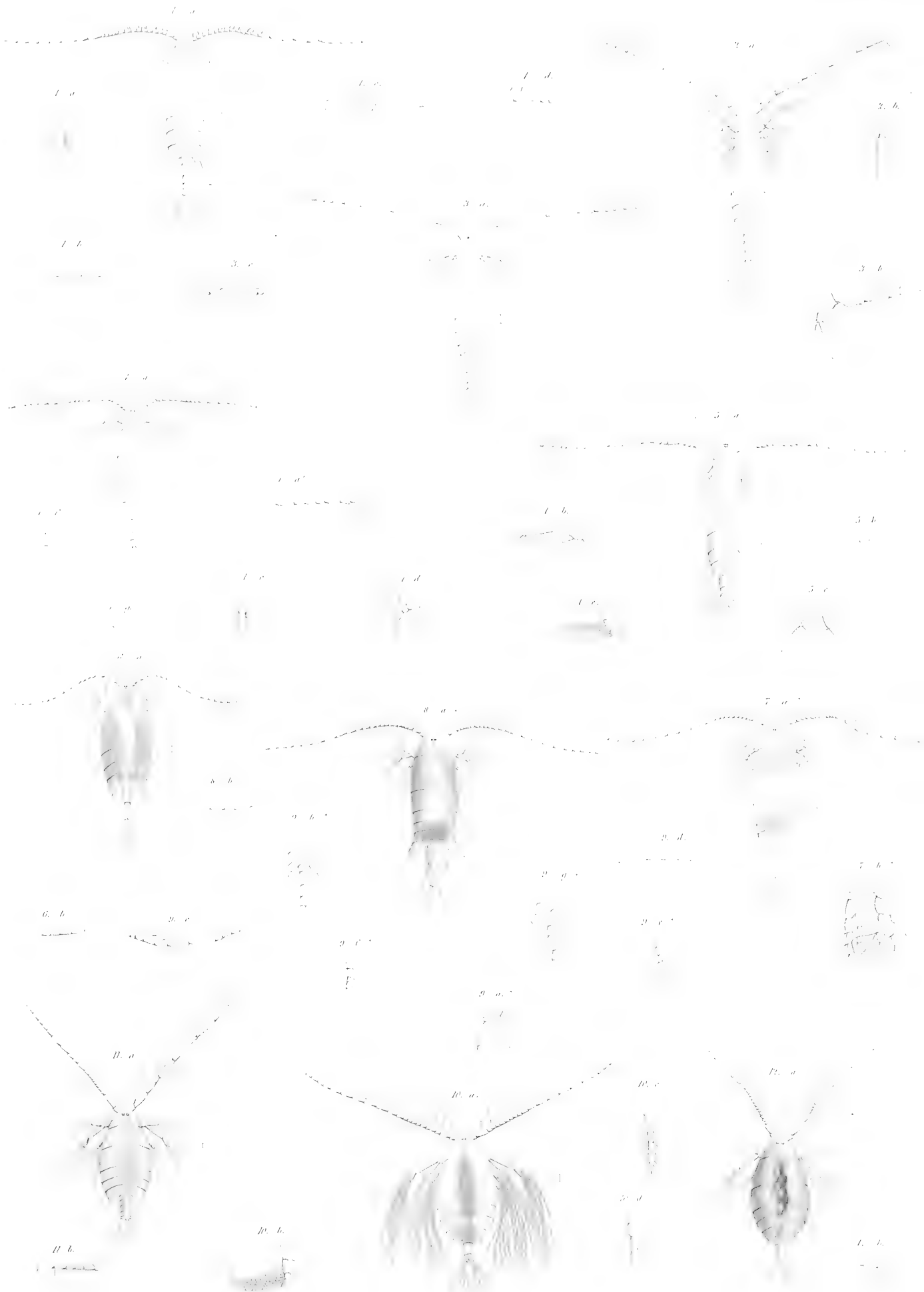






- |         |                                  |         |                                |          |                         |
|---------|----------------------------------|---------|--------------------------------|----------|-------------------------|
| 1 a, f. | Candace ornata                   | 5 a, f. | Candace ethiopica              | 8 a, d.  | Candace truncata        |
| 2 a, b. | 3 a, b. — pachydaetyla           | 6 a, d. | — curta                        | 9.       | Hemicalanus longicornis |
| 4 a     | ?                                | 7 a, b. | — aucta                        | 10 a, b. | Calaninus               |
|         | 11 a, b. Hemicalanus tenuicornis |         | 12 a, b. Hemicalanus gracilis. |          |                         |





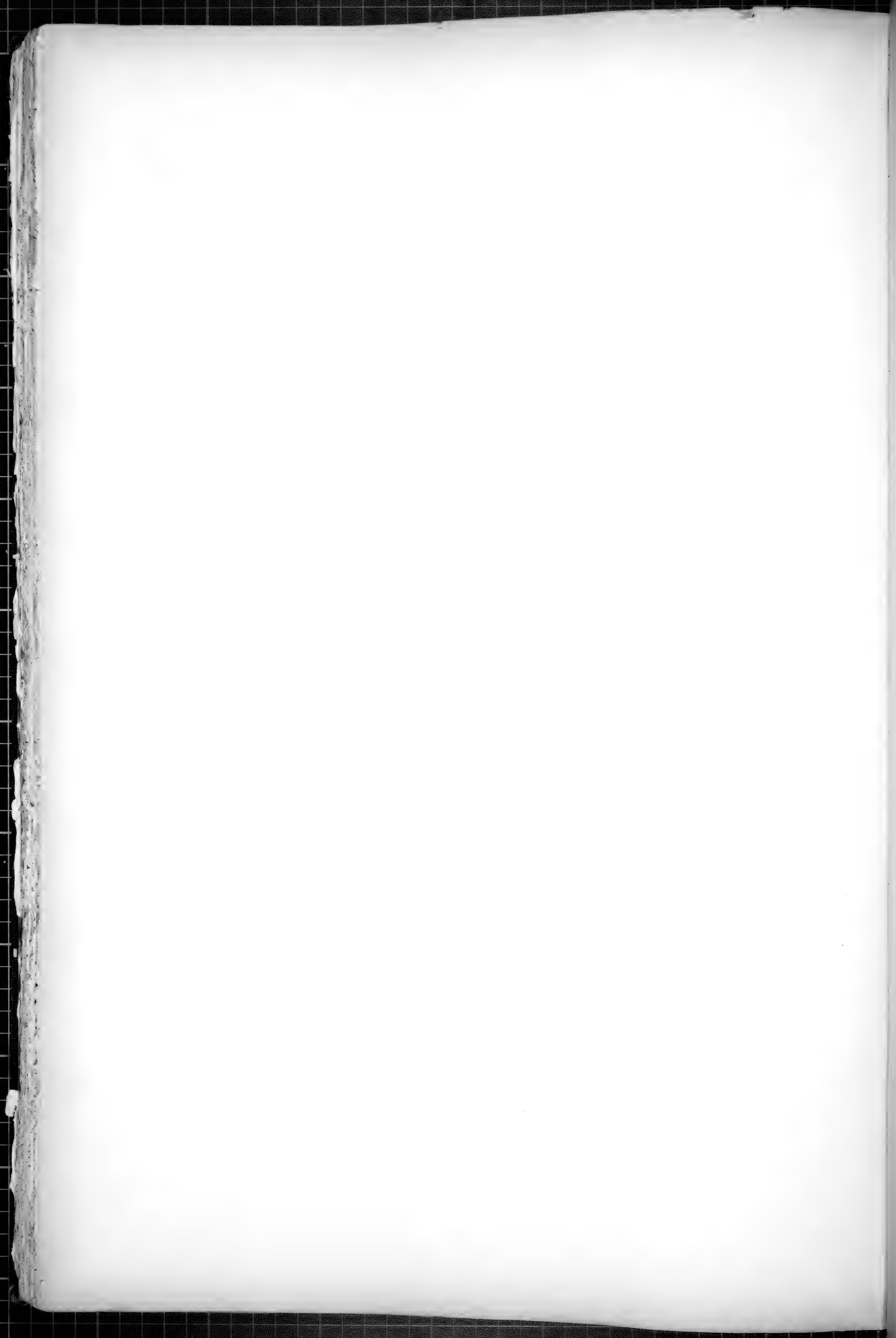
- 1 a...d. *Catopia* *fireata*.  
 2 a...b. *Acartia* *limpida*.  
 3 a...c. ——— *negligens*.

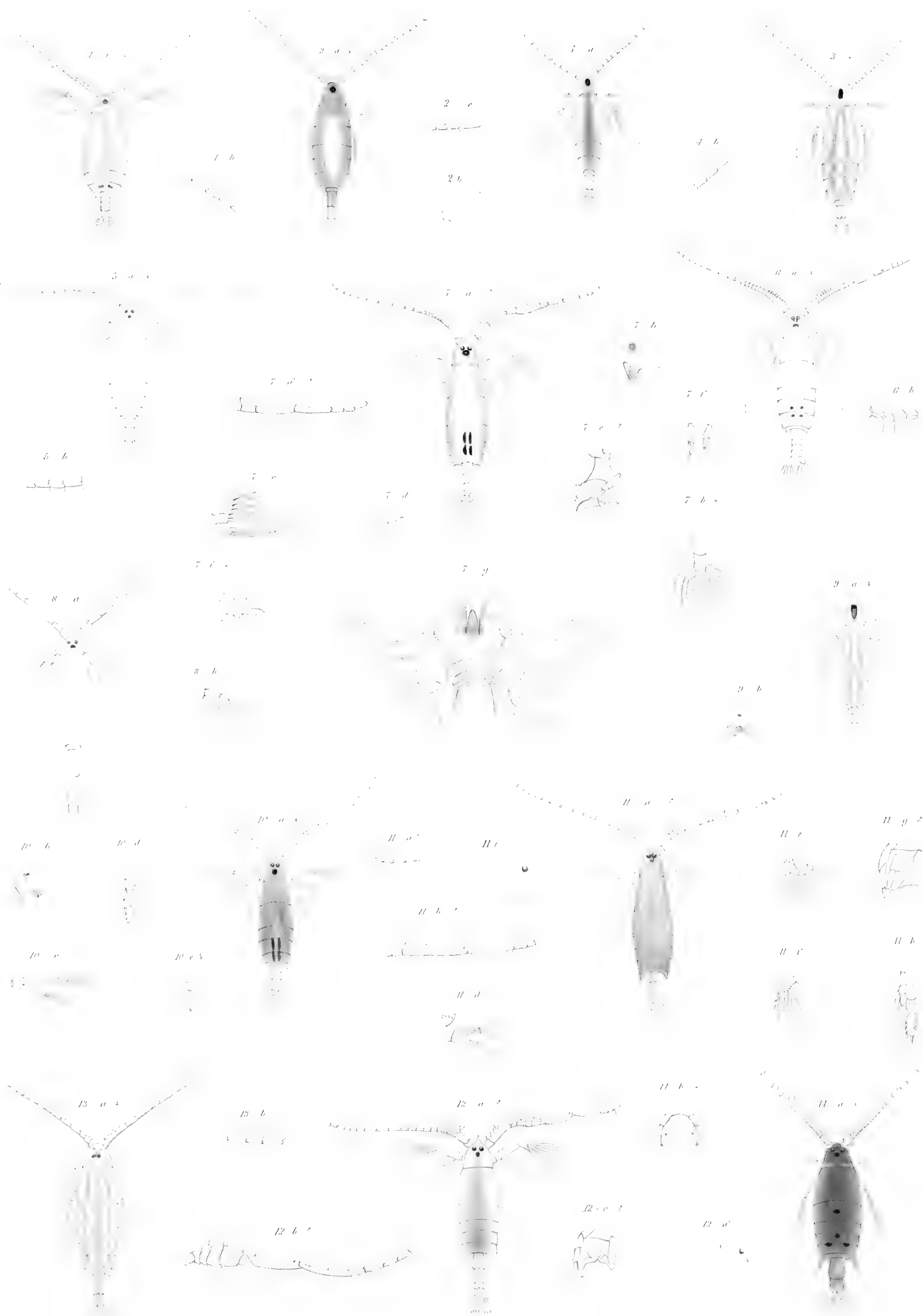
- 4 a...g. *Acartia* *tonsa*.  
 5 a...c. ——— *laxa*.  
 6 a...b. *Calanopia* *elliptica*.

- 7 a...h. 8a,b,9a,c. *Calanopia* *brachiata*.  
 10 a...d. *Pontella* *plumata*.  
 11 a...b. 12a,b,, *turgida*.

*Drawn by J.B. Dana.*

*W.H. Dall.*





1 a b Pontella curta.  
2 a c 3 contracta.  
4 a b — ?  
5 a b media.

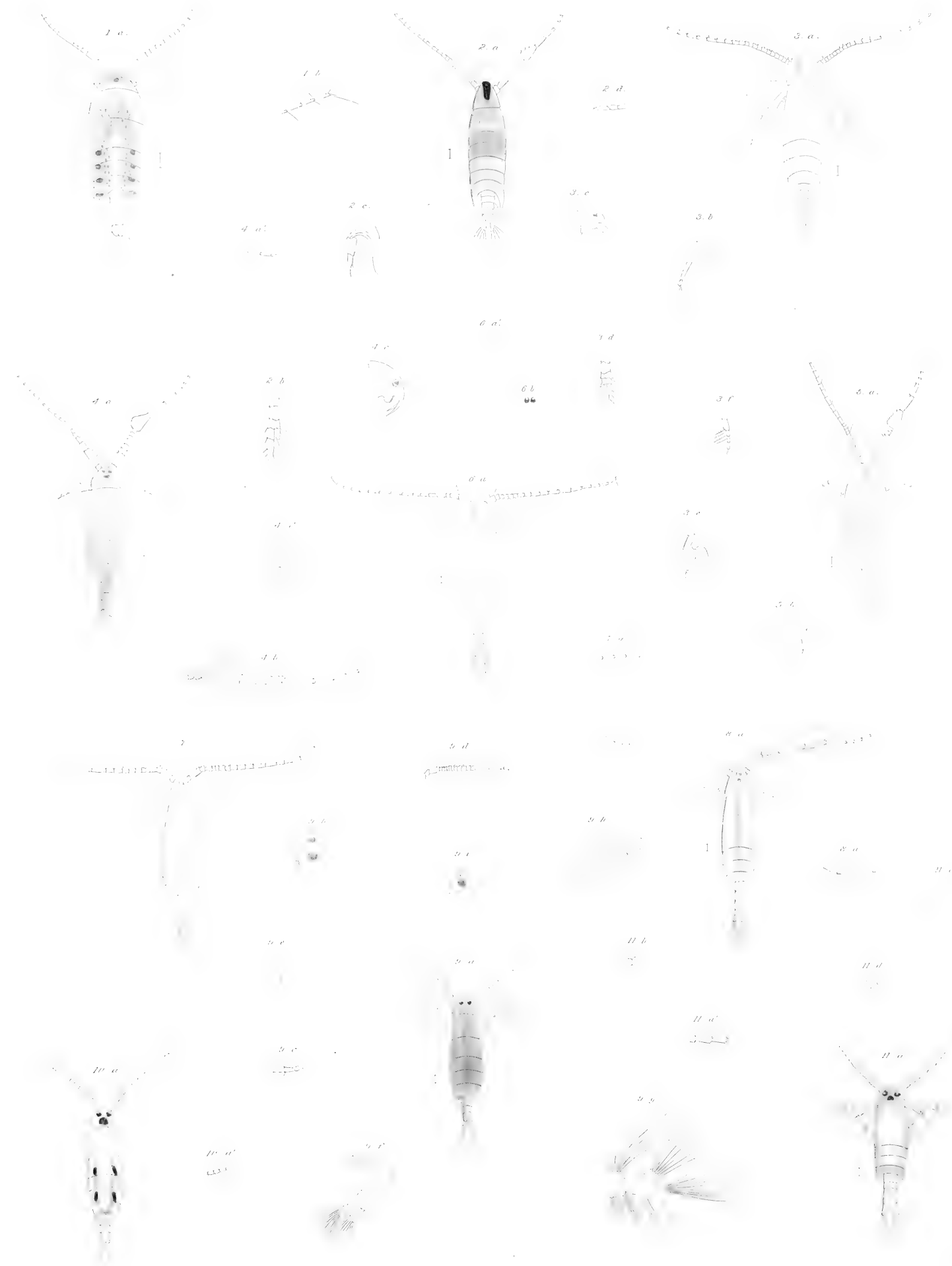
6 a b Pontella crispata.  
7 a i detruncata.  
8 a d — simplex.  
9 a d — exigua.  
10 a e — agilis.

11 a h Pontella acutifrons.  
12 a c acuta.  
13 a b rubescens.  
14 a b emerita.

Drawn by J. D. Dana.







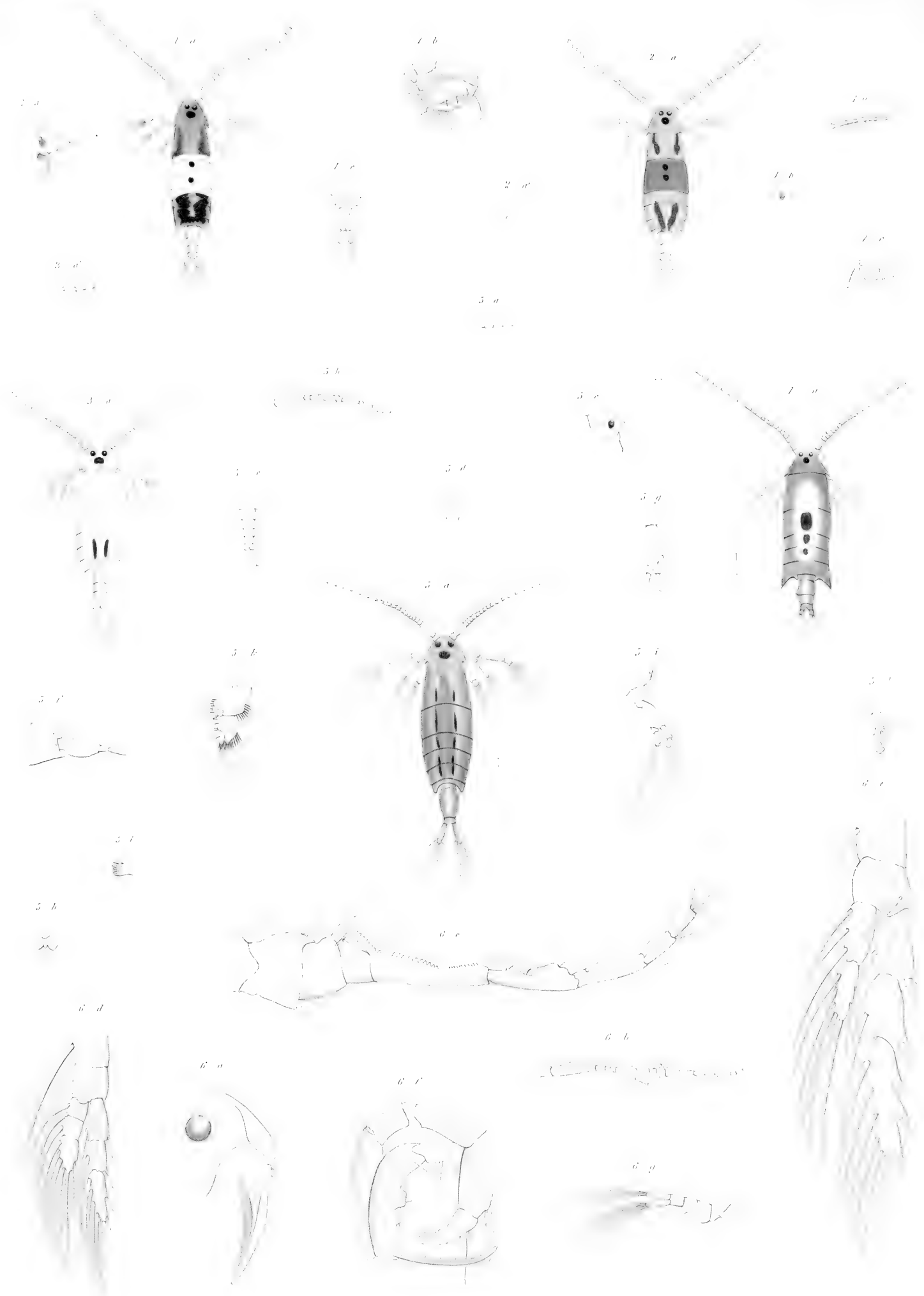
1 a. b. Pontella regalis.  
 2 a. d. ——— perspicax.  
 3 a. f. ——— pulchra.  
 4 a. d. ——— strenua.  
 5 a. b. ——— protensa.

6 a. b. Pontella hebes.  
 7 ——— rivola.  
 8 a. a'. ———  
 9 a. i. 10 a. ——— detonsa.  
 11 a. c. ——— argentea.

Drawn by J. D. Dana

W. H. Long, Sc.



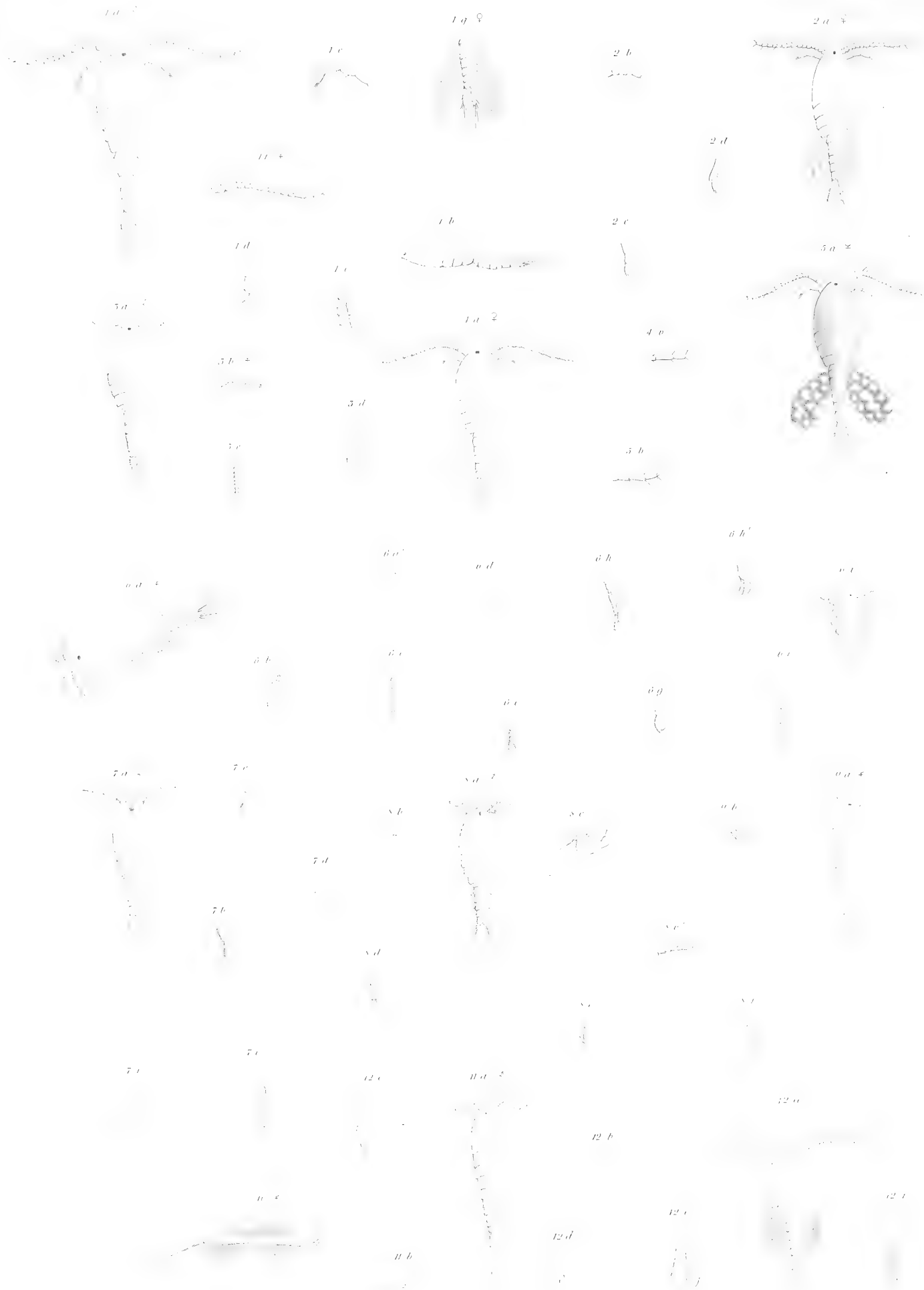


1 a. c. *Pontella speciosa*  
 2 a. c. *speciosa*, var. *formosa*  
 3 a. c. *detonsa*?

4 a. c. *Pontella princeps*  
 5 a. l. *lera*  
 6 a. q. *valida*

drawn by J. D. Dyer





1 a . . . q. Cyclops brasiliensis.  
 2 a . . . d. curticaudis.  
 3 a . . . d. pubescens.  
 4 a . . . b. Mac-Leayi.

5 a . . . b. Cyclops vitiensis.  
 6 a . . . i. Canthocamptus virescens.  
 7 a . . . f. Harpacticus concinnus.  
 8 a . . . f. sacer.

9 a . . . b. Canthocamptus linearis.  
 10. . . . . roscus.  
 11 a . . . b. Harpacticus? acutifrons.  
 12 a . . . f. Clytemnestra scutellata.







1 n.k. *Setella tenuicornis*: H. Langmuir.  
2 n.k. ——— *longicauda*.

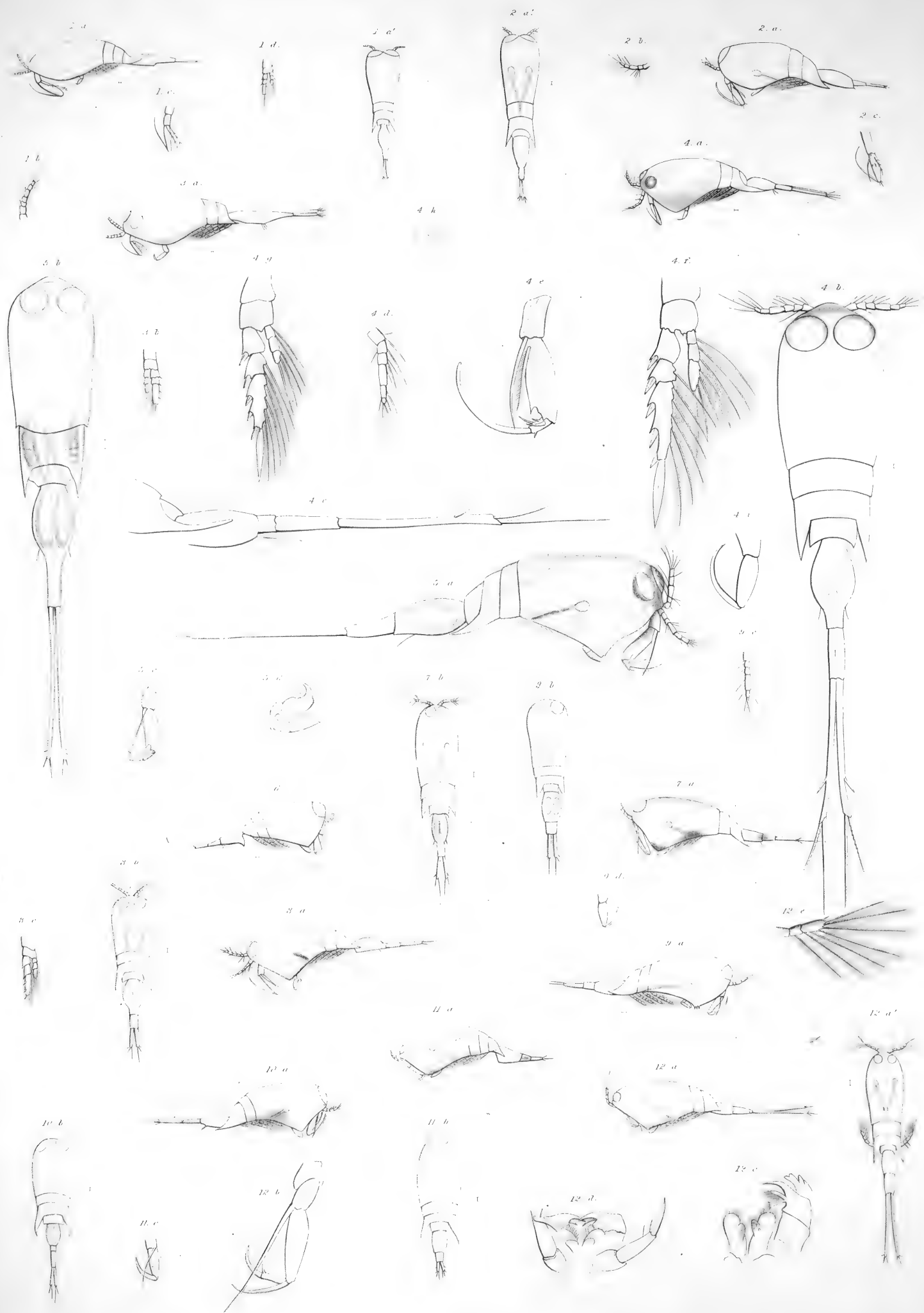
*Imag. by J. D. Dana*

3 n.d. *Setella aciculatus*.

4 n.d. *Setella gracilis*.  
5 n.d. ——— *crassicauda*.

*Imag. by J. D. Dana*





1 a..d. Corycaeus gracilis.  
 2 a..c. ——— decurtatus.  
 5 a..b. ——— deplumatus.  
 4 a..i. ——— varius.

5 a..d. Corycaeus longistylis.  
 6 ——— obtusus.  
 7 a..b. ——— crassiusculus.  
 8 a..c. ——— laticeps.

9 a..d. Corycaeus vitreus.  
 10 a..b. ——— agilis.  
 11 a..c. ——— orientalis.  
 12 a..e. ——— lautus.

Drawn by J.D. Dana.

W.H. Bennett.





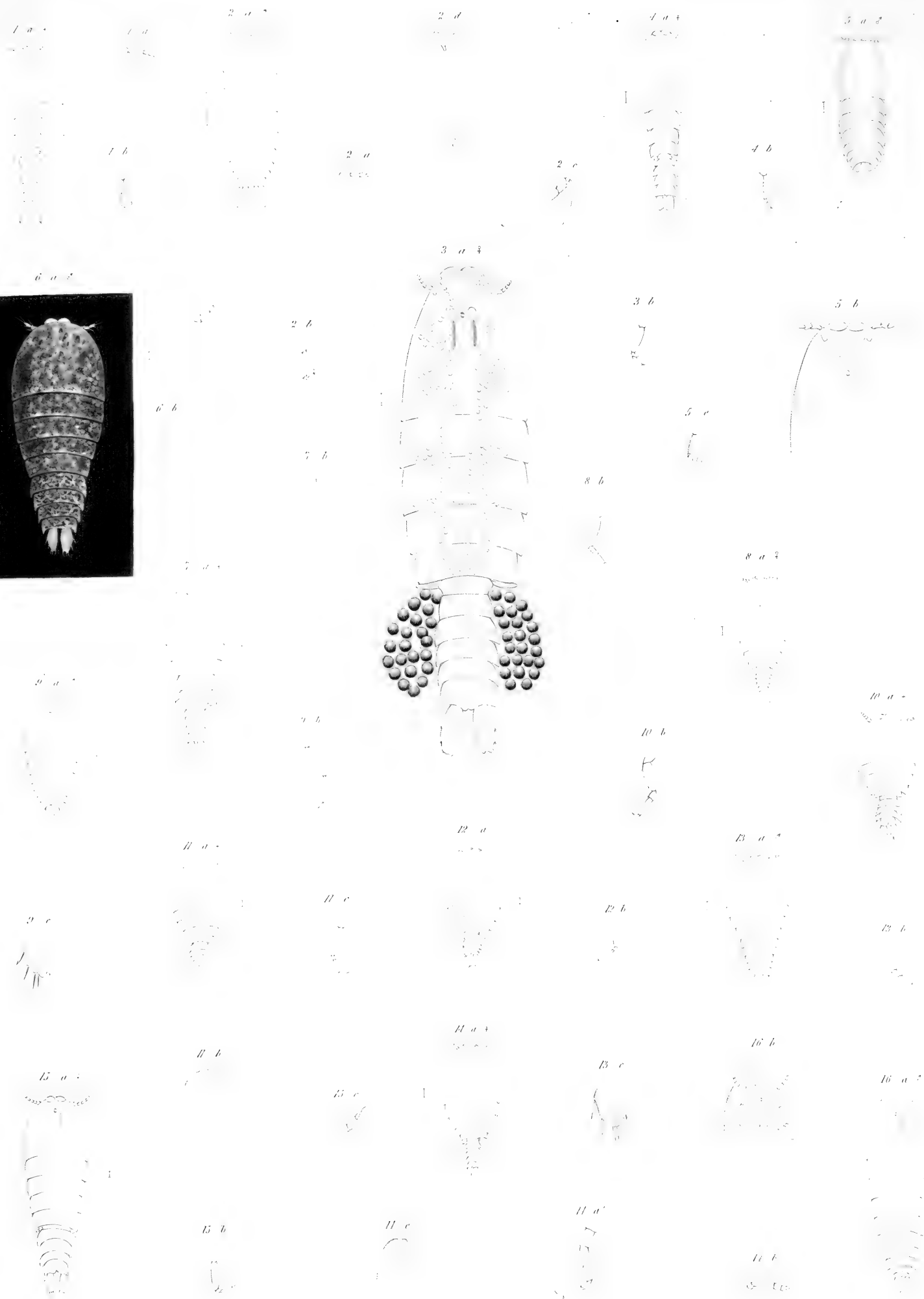
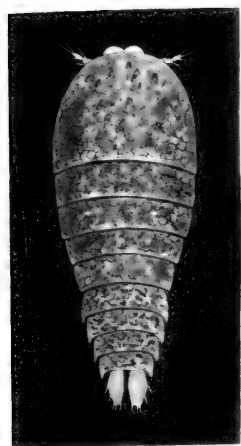
- 1 a, d. *Corycaeus speciosus*.  
 2 a, b. ——— *remiger*.  
 3 a, c, e. ——— *latus*.  
 4 a, d. ——— *venustus*.  
 5 a, b. ——— *inquietus*.

- 6 a, d. *Corycaeus pellucidus*.  
 7 a, b. ——— *concinus*.  
 8 a, b. ——— *productus*.  
 9 a, c. ——— *longicaudis*.  
 10 a, c. *Antaria crassimana*.

- 11 a, d. *Antaria gracilis*.  
 12 ——— *gracilis*, var.  
 13 a, c, e. ——— *obtus*.  
 14 a, b. *Copilia mirabilis*.  
 15 a, d. ——— *quadrata*.







1 a, c., 2 d., *Sapphirina iris*  
 3 a, b., *angusta*  
 4 a, b., *elongata*  
 5 a, c., *metallina*

6 a, b., *Sapphirina coruscans*  
 7 a, b., *inæqualis*  
 8 a, b., *ovata*  
 9 a, c., *splendens*  
 10 a, b., *ovalis*

11 a, c., *Sapphirina detonsa*  
 12 a, b., *indigotica*  
 13 a, c., 14 a, c., *orientalis*  
 15 a, c., 16 a, b., *ovato-lanceolata*





1 a. f. 2 a. g. Sapphirina gemma.  
3 a. d. bella.  
4 a. l. opalina.  
5 a. e. versicolor.  
6 a. c. 7 a. n. tenella

8 a. b. Sapphirina obesa.  
9 — — — obtusa.  
10 — — — obtusa.  
11. Miracia efferata.  
12 a. c. — — — gracilis.





1 a...f. *Daphnella angusta*.  
2 a. b. *Penilia avirostris*.  
3 a...e. ——— *orientalis*.

4 a...e. *Daphnia australiensis*.  
5 a. b. ——— *macrura*.  
6 a. b. *Ceriodaphnia textilis*.

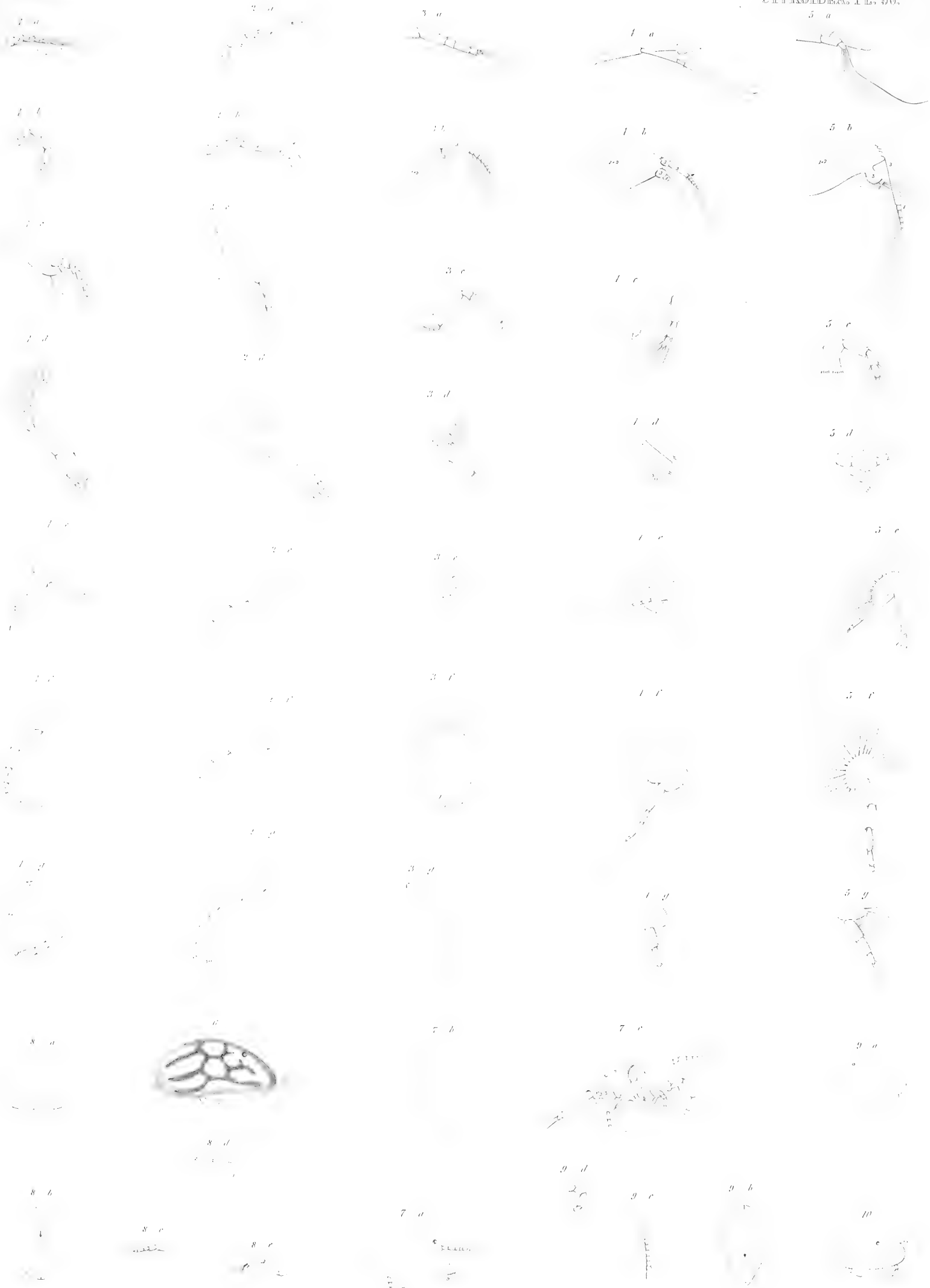
7 a. b. *Lynceus latifrons*.  
8 a...c. *Pleopis brevicaudis*.  
9 a...l. *Cythere americana*.

Drawn by J.D. Dana.

W.H. Dall.







- 1 a. g. *Cypris chilensis*  
 2 a. g. *Cythere americana*  
 3 a. g. *Cypridina*

*Drawn by C. D. Dana*

- 4 a. g. *Conchoecia*  
 5 a. g. *Halocypris inflata*  
 6 *Cypris speciosa*  
 7 a. g. *— chilensis*

- 8 a. c. *Cypris pubescens*  
 9 a. d. *Candona? vitiensis*  
 10 *— ? albida*

*W. H. Dall*





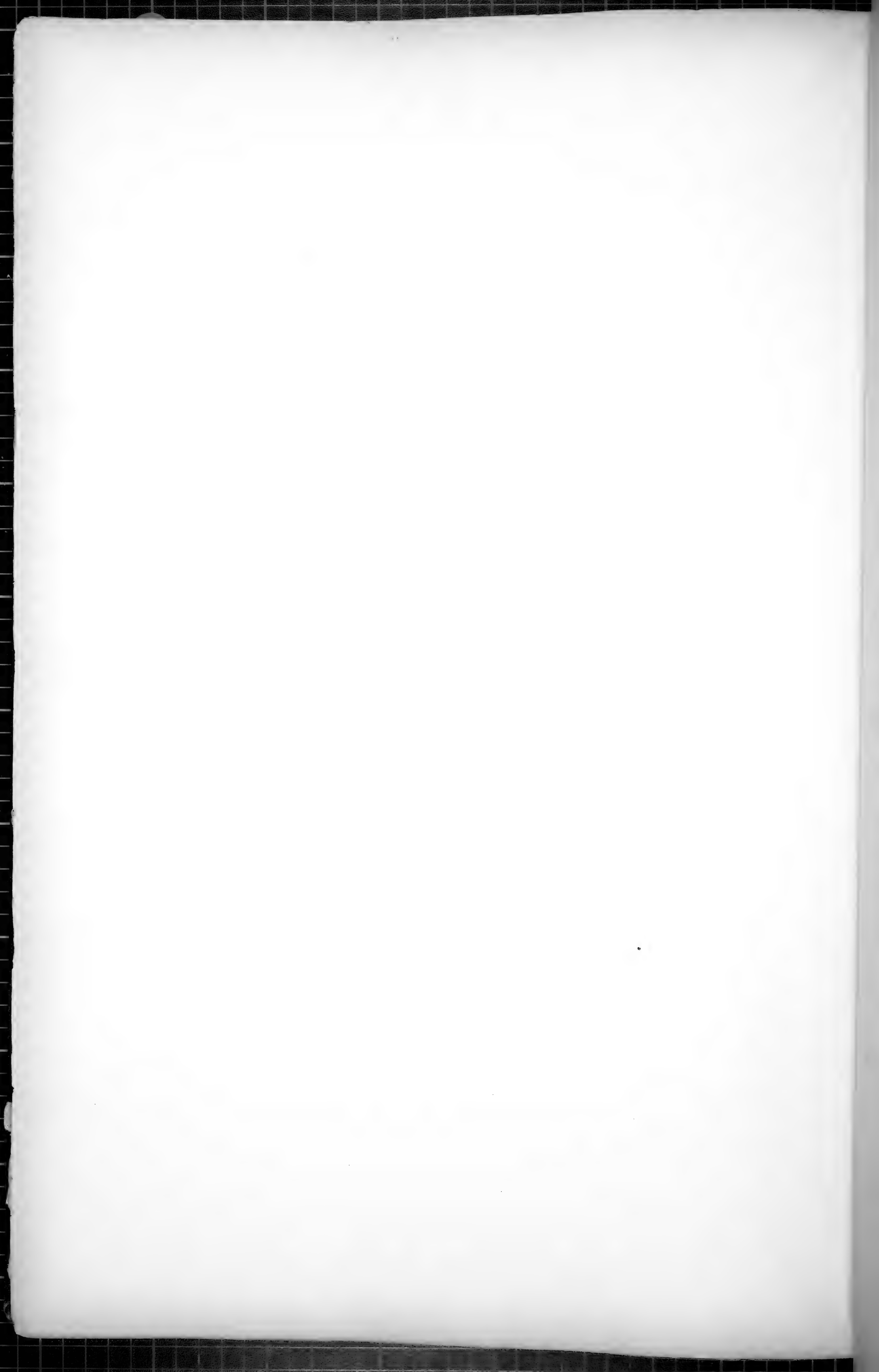
1 a..n. Cypridina luteola.  
 2 a..h. ————— punctata.  
 3 a..h. ————— olivacea.

4 a..e. Cypridina gibbosa.  
 5 a..h. ————— formosa.  
 6 a..e. Conchocia agilis.

7 a..f. Conchocia rostrata.  
 8 a..k. Halocypris inflata.  
 9 a..c. ————— brevirostris.

Drawn by J.D. Dana.

W.H. DeLong Sc.





1 a...k. Sapphirina.  
2 b...k. Argulus.  
3 a...k. Caligus.

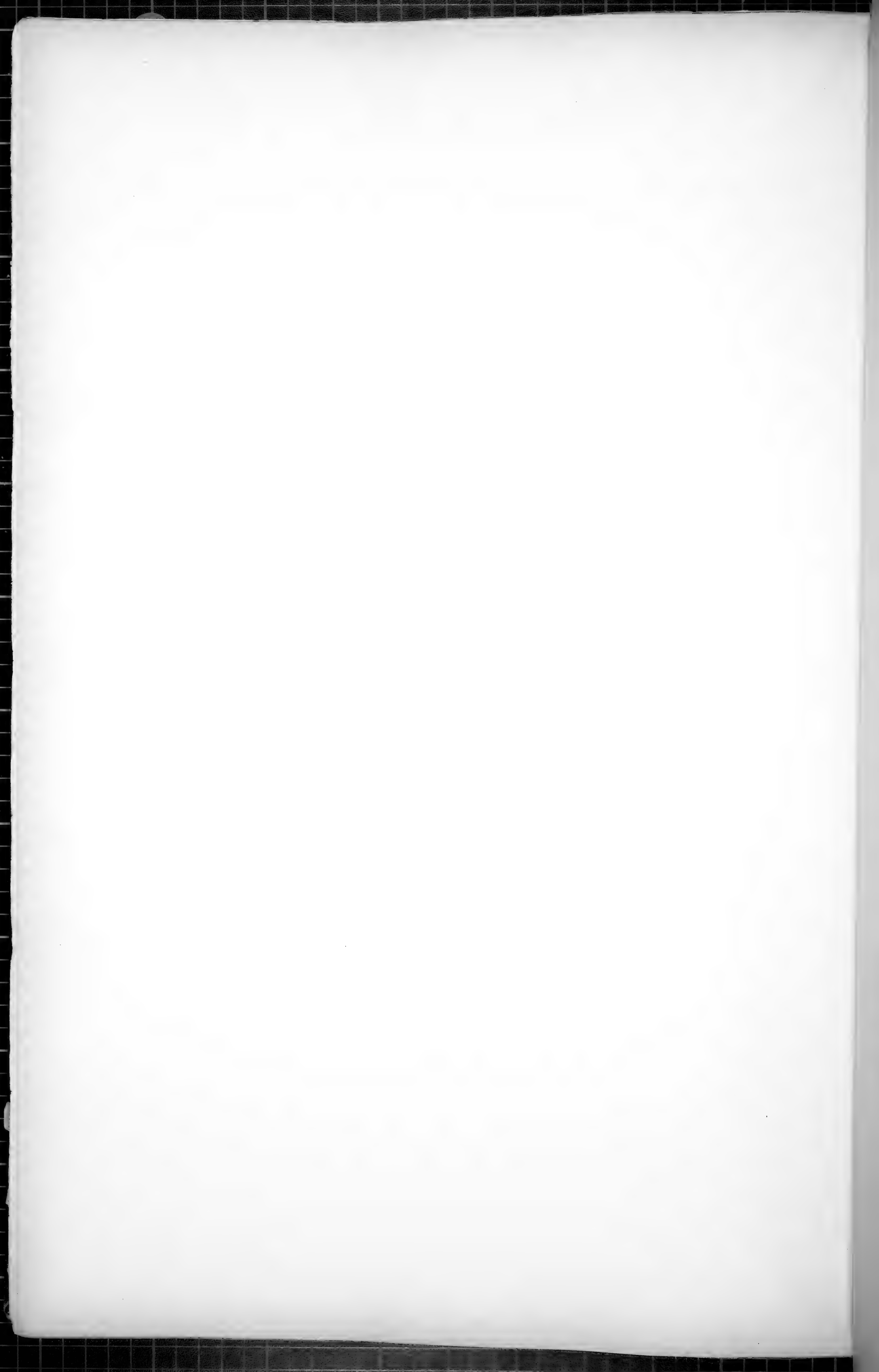
4 a...k. Pandarus.  
5 a...k. Lepidopus.  
6 a...i. Dichelestion.

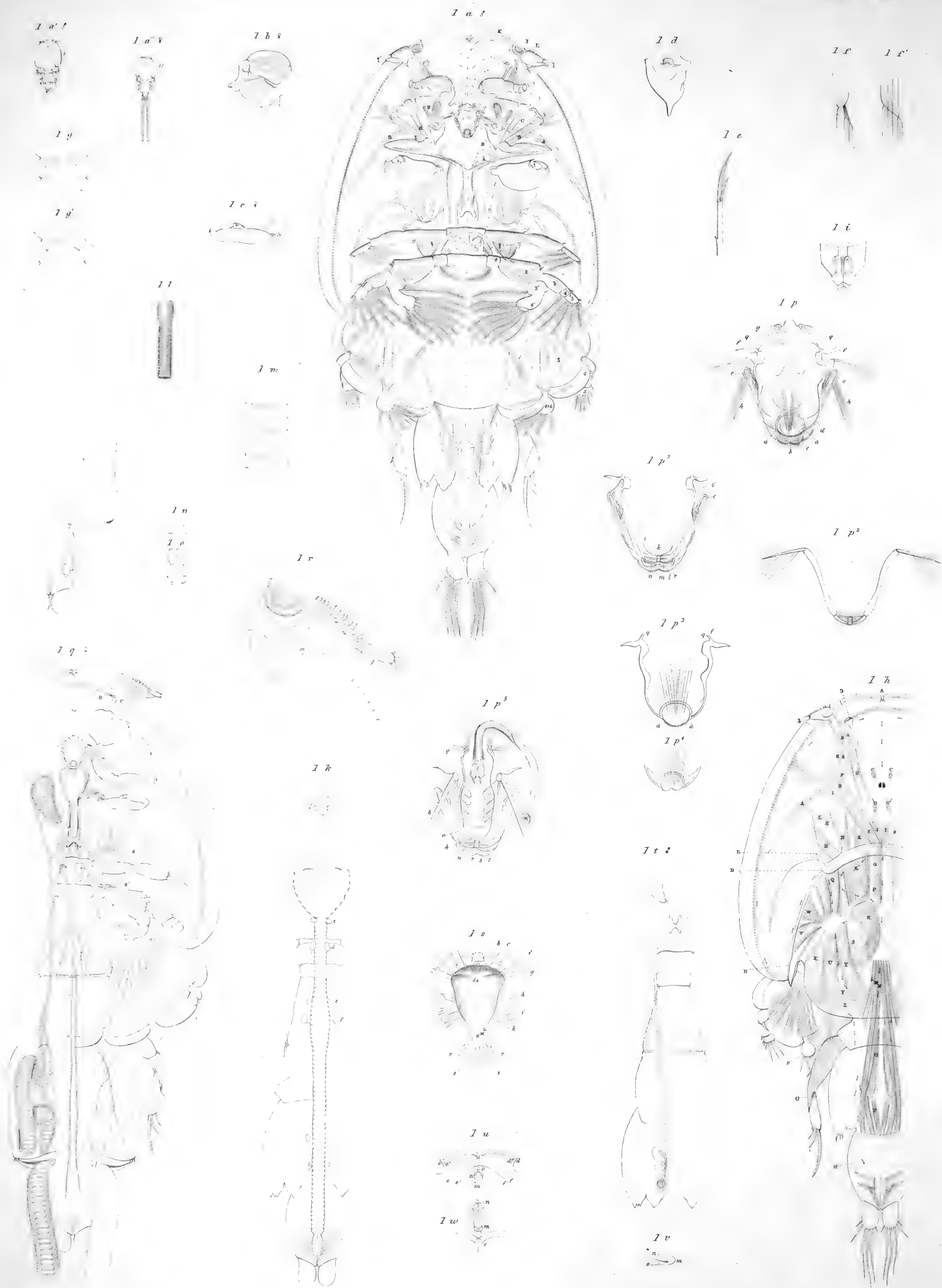
7...7 h. Lernentoma.

Drawn by J.D. Dana.

W.H. Deugal, Sc.



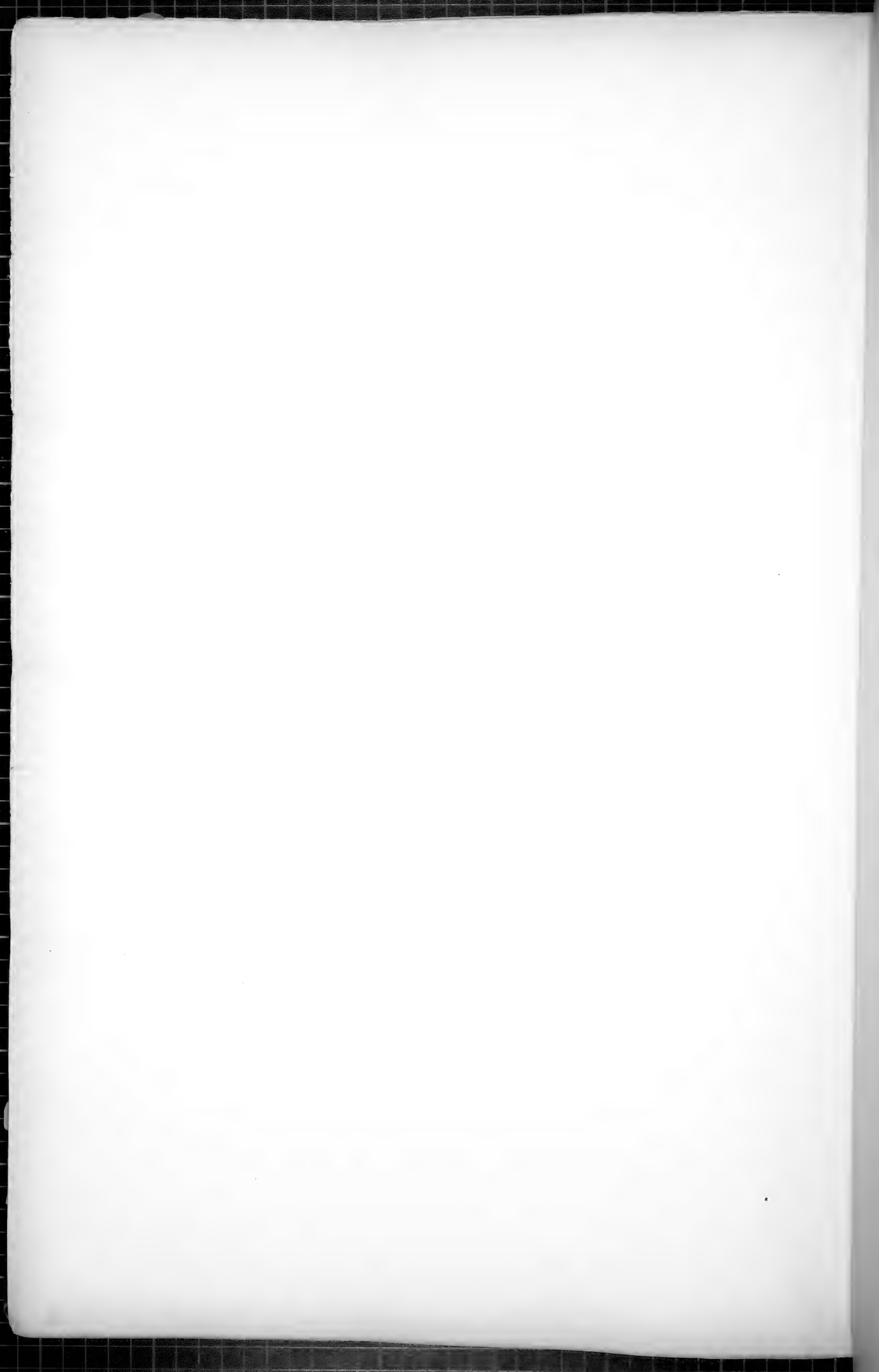


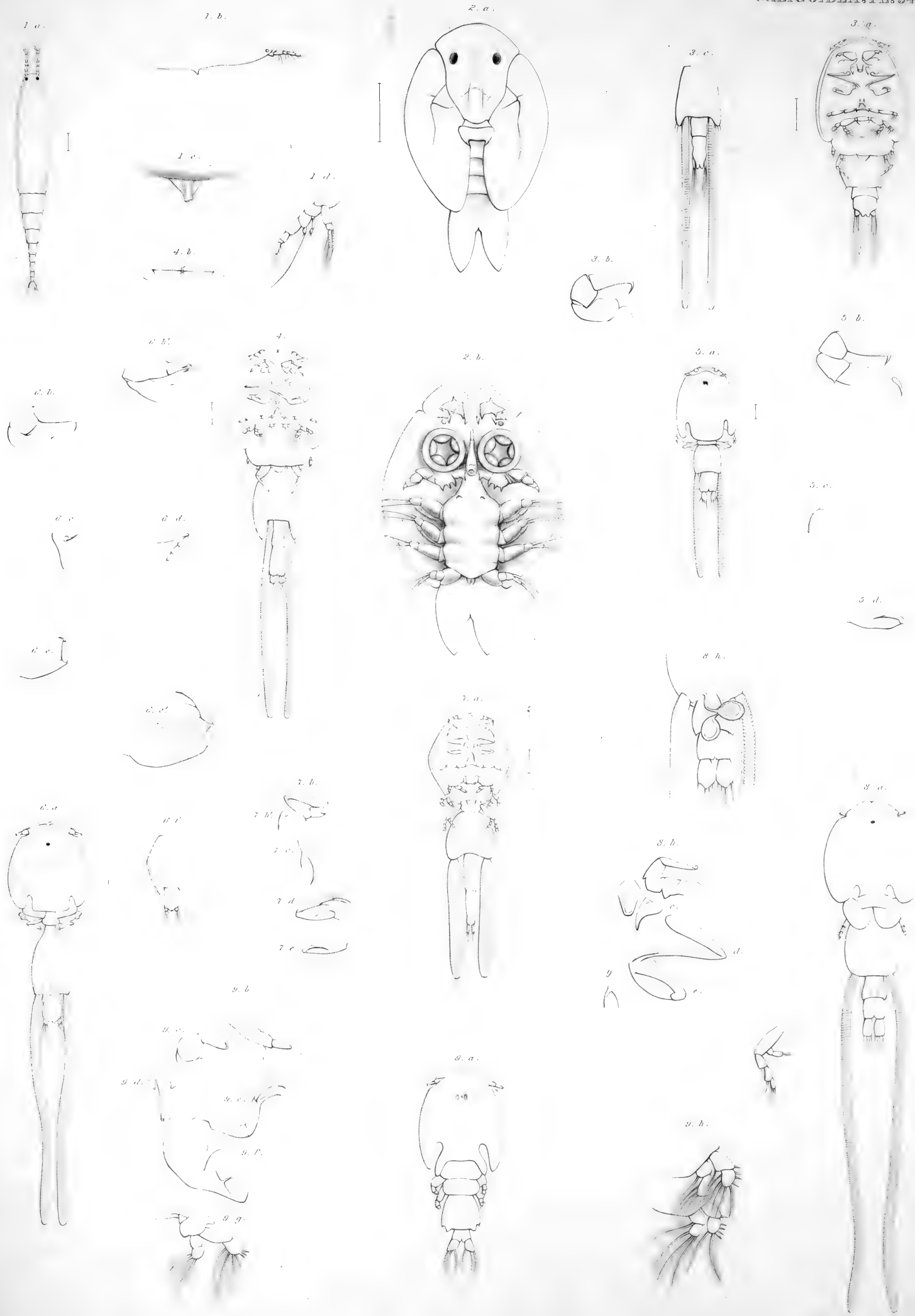


*Caligus Americanus*

Drawn by J. D. Dana.

W. H. Dougal Sc.





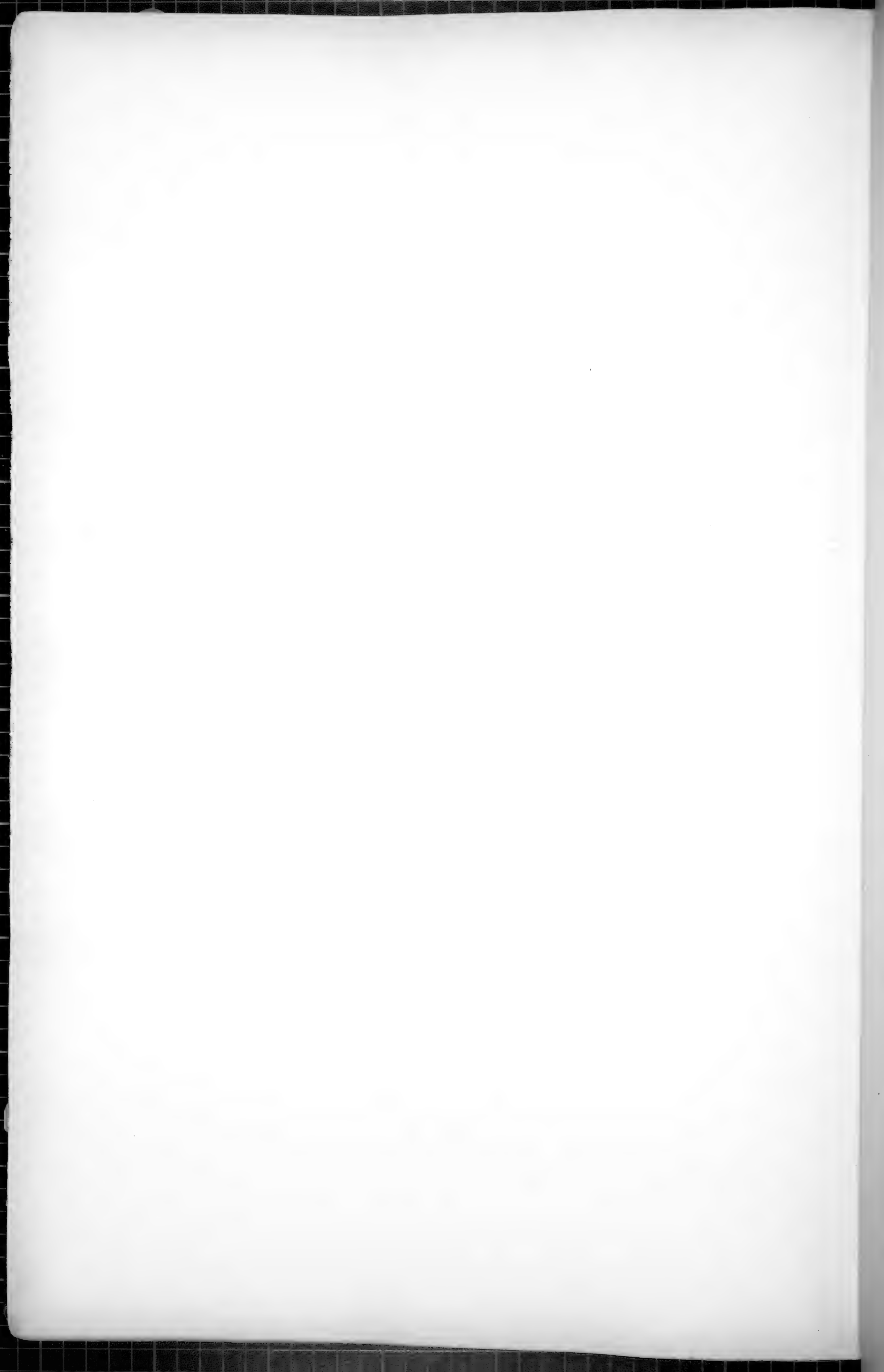
1 a..d. Monstrilla viridis.  
2 a. b. Argulus pugettensis.  
3 a..c. Caligus thymni.

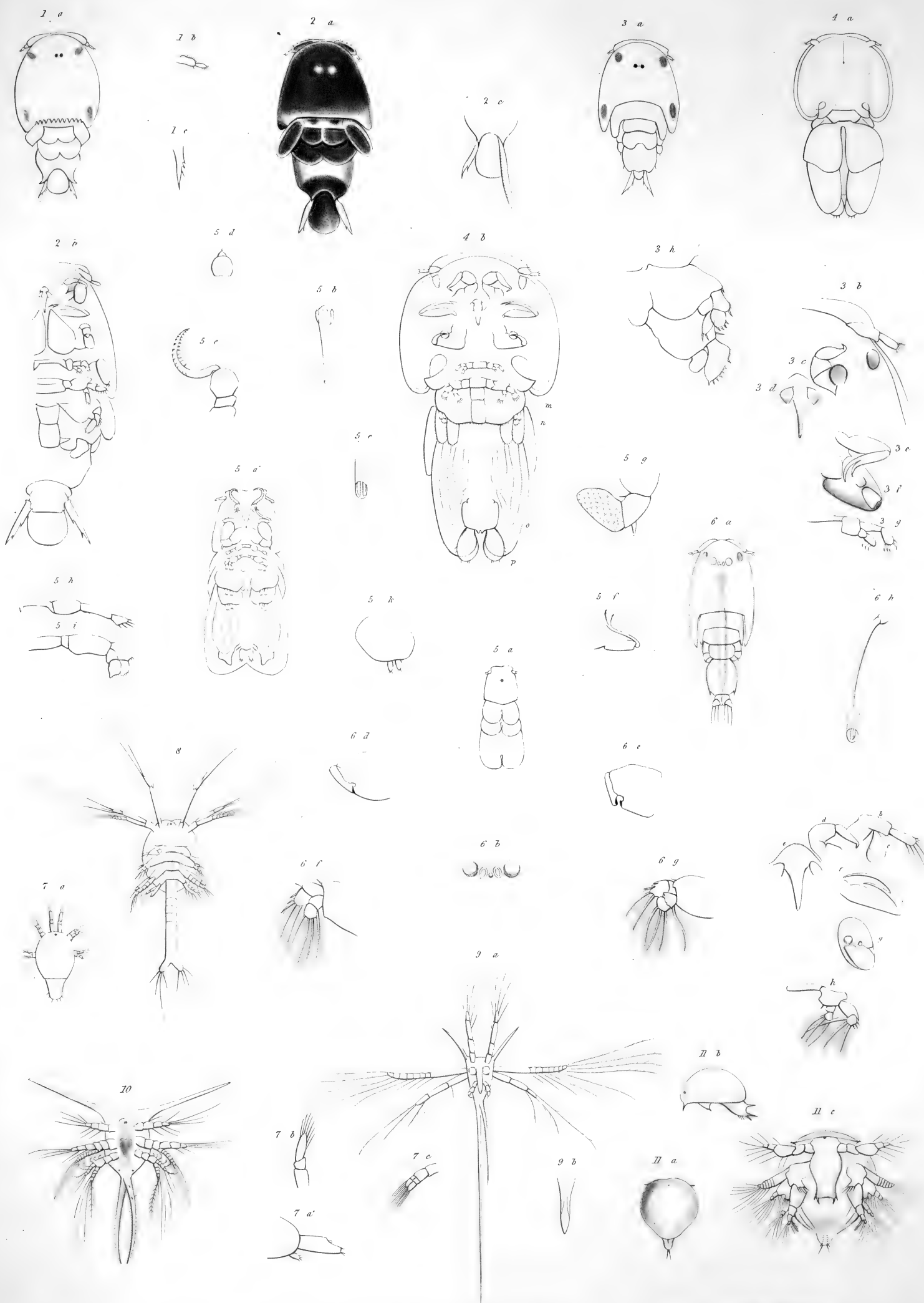
4. Caligus productus.  
5 a..d. ——— gracilis.  
6 a..h. Lepeophtheirus bagri.

7 a..e. Calistes Trigonis.  
8 a..h. Caligeria bella.  
9 a..h. Nogagus validus.

Drawn by J.D. Dana.

W.M. Douglas Sc.



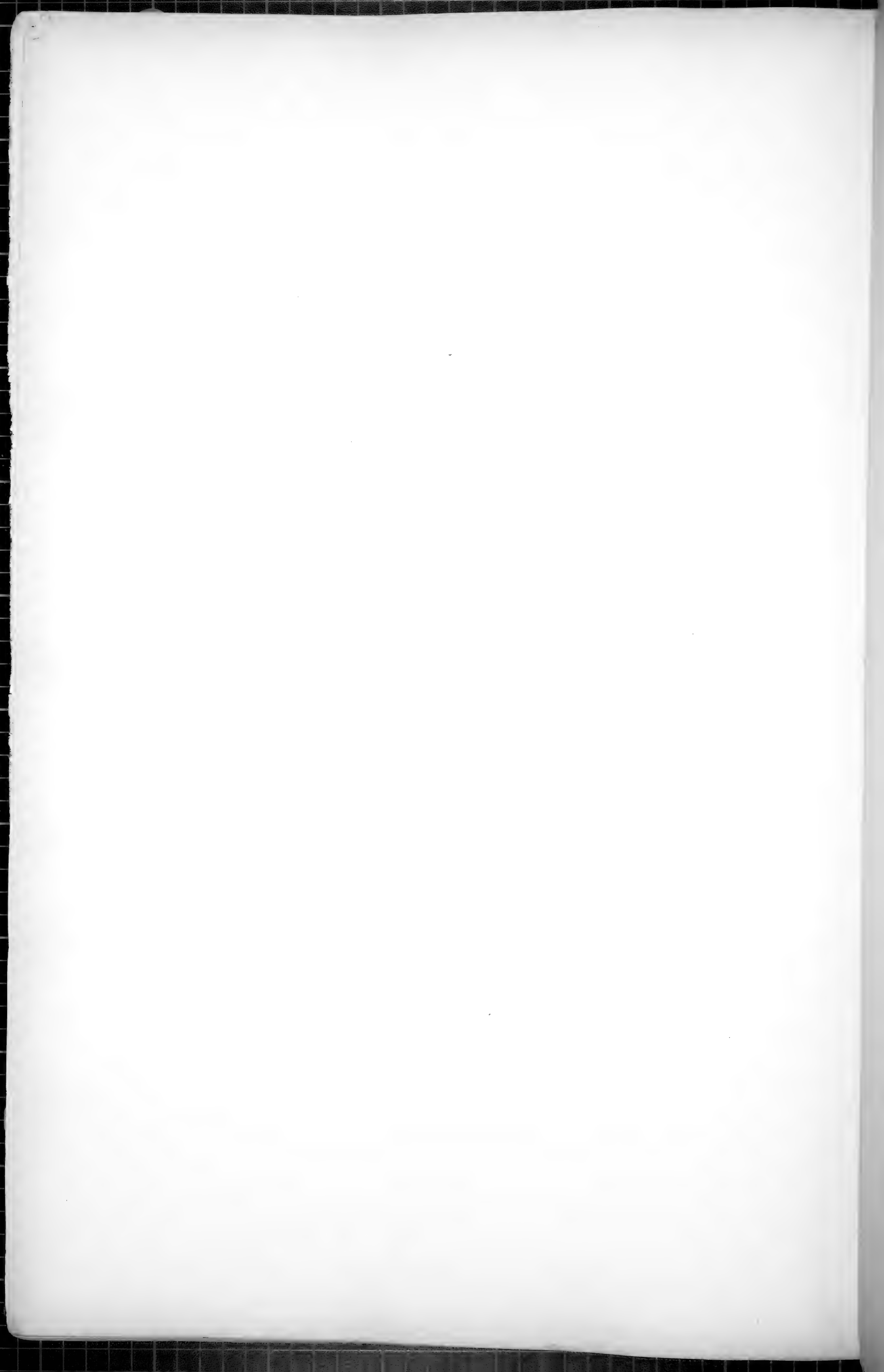


1 a. c. *Pandarus concinnus*  
2 a. c. \_\_\_\_\_ *satyrus*  
3 a. h. \_\_\_\_\_ *brevicandis*

4 a. b. *Dinematura braccata*  
5 a. k. *Lepidopus armatus*  
6 a. h. *Specilagus eurticandis*

7 a. c. *Corycaeus deplanatus* jun.  
8 Young of a *Schizopod*?  
9 10 Young of \_\_\_\_\_?  
11 Young of *Balanus*?

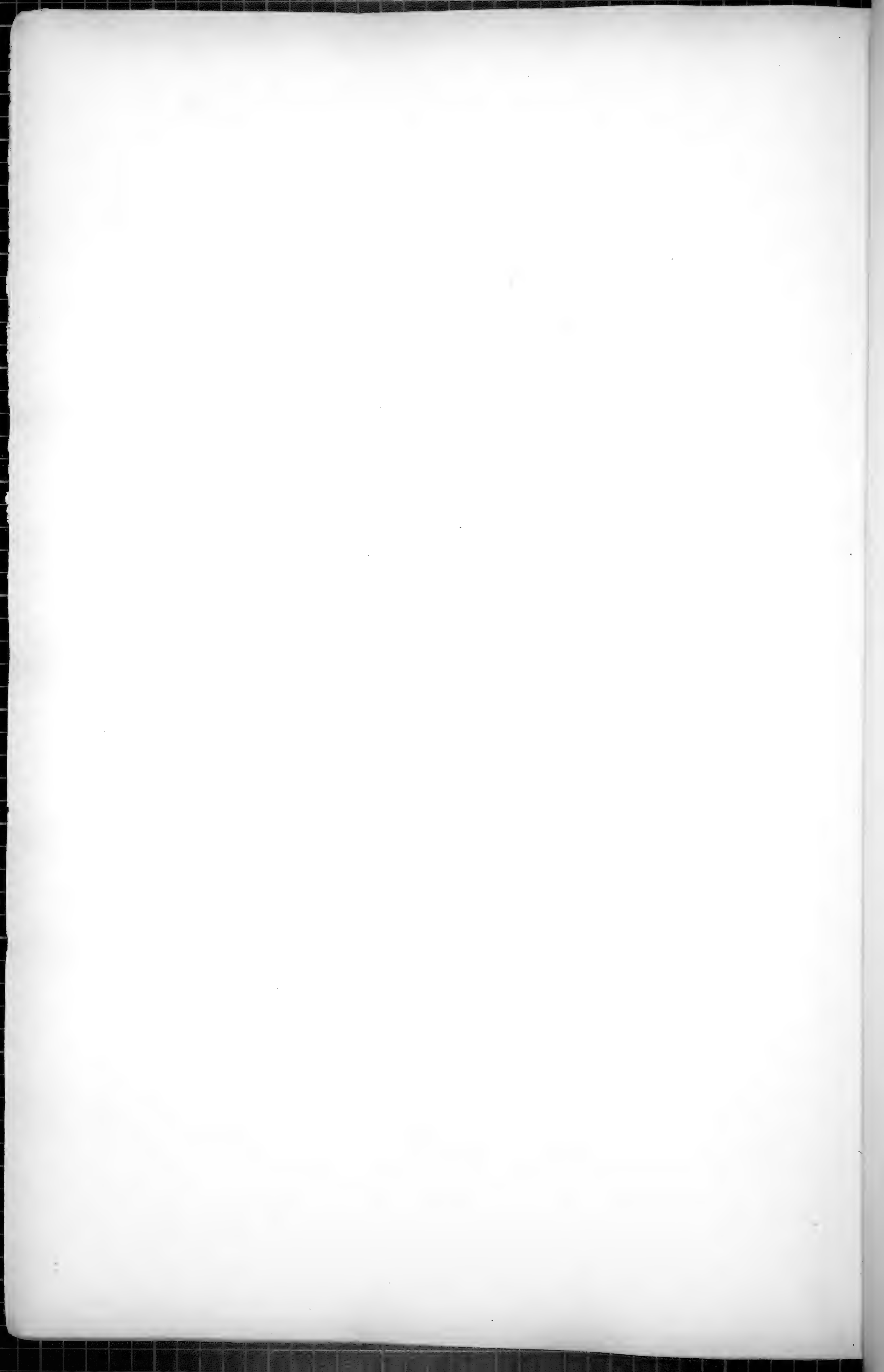


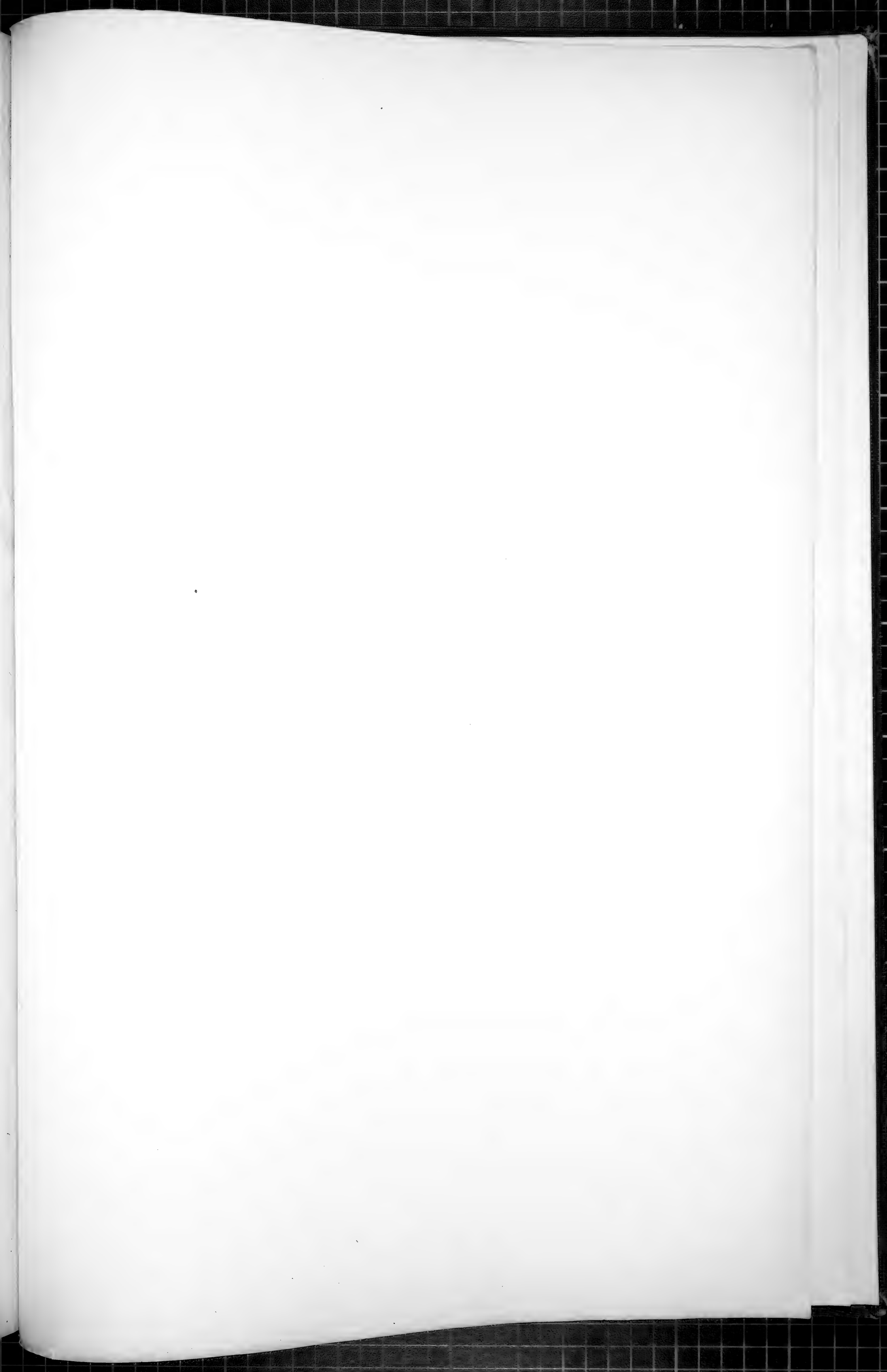




1. a. 1. *Lernaeopoda californensis.*  
2. a. c. *Pycnogonum orientale.*

3. 8. *Anatididae.*  
9. a. g. *Acastra sporillus.*

















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